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THE AMERICAN ELEVATOR AND GRAIN TRADE



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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

One Dollar Per Annum
SINGLE COPIES, 15 CENTS

VOL. XLI

431 South Dearborn Street, Chicago, Ill., November 15, 1922

NO. 5

WE ARE **PROGRESSIVE** ENOUGH
TO BE **AGGRESSIVE** FOR YOU

McKENNA & DICKEY
Grain

60 BOARD OF TRADE
CHICAGO

For your
Business Sake
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GOUDY MAYFIELD

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Consign Grain and Hay to

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GRAIN—HAY—STOCKS—BONDS—PROVISIONS

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An average increase of over one-half gallon of milk on an entire herd.

Development of baby pigs showing an increase of six times their weight in eight weeks.

A gain of four pounds a day for ten days on hogs. An increase in egg produc-

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CONSULTATION

tion over ordinary farm grains of 200%.

Seventy percent increase in egg production in 20 days, including an increase in weight of eggs per dozen.

Increase in poultry fattening of as much as a half pound in four days, and a pound gain in a week.

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Superintendent Bought

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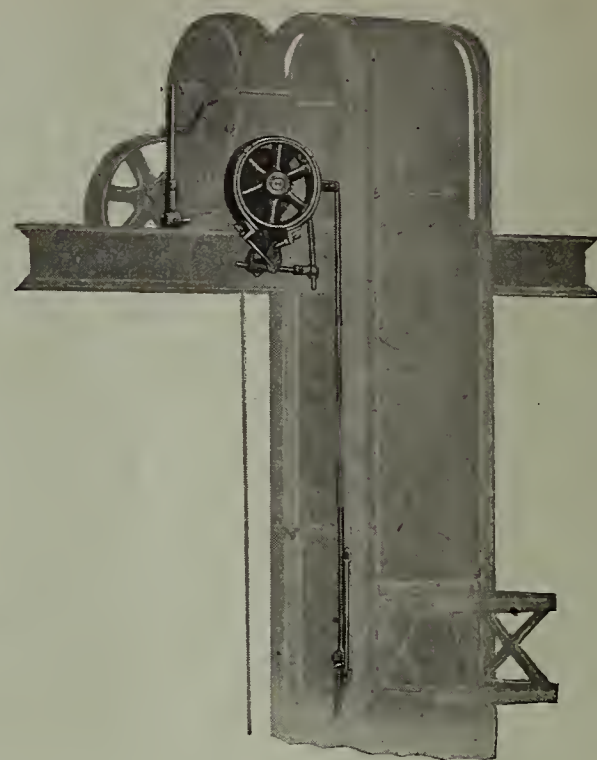
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WITH the upper terminal automatic stop in operation there is no danger of being carried overhead and injured. The weight of the passenger after the top floor is reached automatically throws a lever, shutting off the power and applying the brake, thereby locking the belt and steps against movement in either direction.

The automatic stop mechanism furnished with the Nordyke & Marmon Company service elevator adds the vital feature of safety to the elevator's other excellent qualities of reliability and utility.

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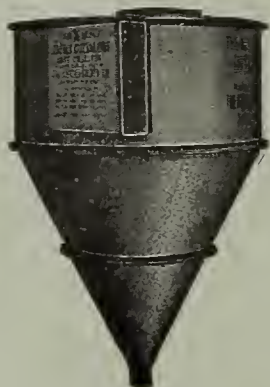
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For Grain Cleaners

ALL STEEL



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The Knickerbocker Company

Jackson, Mich.

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Be it the pronunciation of Bolshe-
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ing of blighty, fourth arm, etc., this Supreme Authority—

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Union Iron Works,
Decatur, Ill.

St. Joseph, Ill., Feb. 10, 1922.

Gentlemen:

We certainly appreciate the quick service given on our order for transmission rope yesterday morning. Ten years of observation leads us to believe that no other concern dealing in elevator machinery and supplies can come anywhere near equalling your courtesy and service to your customers.

Yours truly,
BEAR AND GRUSSING,
Per Otis J. Bear.

Let us extend this service to you

Drag Chains
Elevator Buckets
Elevator Boots
Turn Heads
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Grain Conveyors

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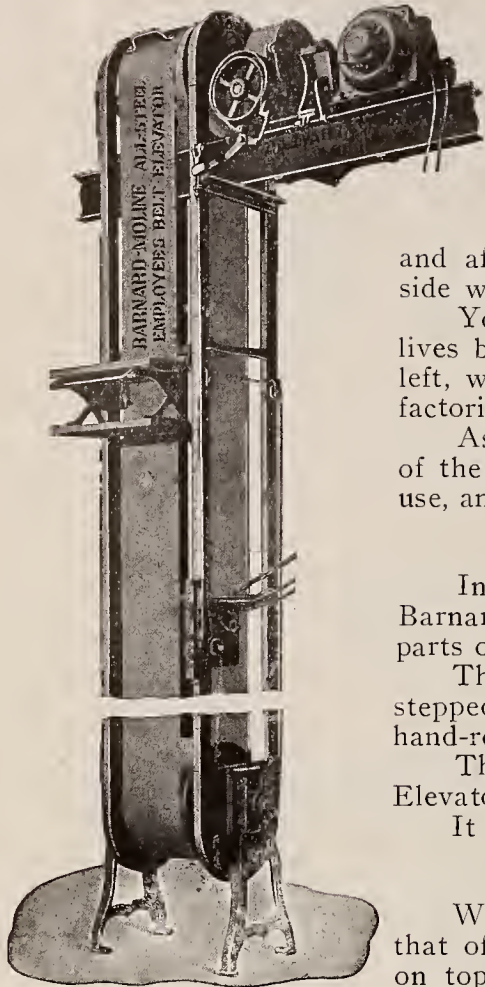
UNION IRON WORKS
DECATUR : : ILLINOIS

Write for Catalog No. 27

Save Your Time, Health and Energy

BY USING A—

Barnard-Moline All Steel Employees' Continuous-Moving-Belt Elevator



Think how pleasant and convenient it would be to walk over to a constantly moving passenger elevator, step on and be elevated to the top floor with safety and after performing the duties that necessitated your errand, return on the down-going side with practically no effort on your part.

You and your employees can enjoy just such conveniences, save time and prolong your lives by installing a Barnard-Moline All Steel Employees' Belt Elevator, illustrated to the left, which is especially designed for use in large and small mills, elevators, warehouses, factories, etc.

As its name implies, it is constructed entirely of steel and cast iron except the tops of the double-tread steps, which are made of hard wood. There are thousands of them in use, and all giving complete satisfaction.

SAFETY STOP DEVICE PREVENTS "GOING OVER THE TOP"

In operation, should a passenger fail to alight at the last upper landing station, the Barnard-Moline Patented Automatic Safety Stop Device automatically stops all moving parts of the elevator and locks it.

The elevator will positively remain locked in this position until the passenger has stepped off and goes to the side of the elevator and restarts it manually by use of the hand-rope, which is installed the full height of the elevator.

Think of the feeling of safety riding a Barnard-Moline All Steel Employees' Belt Elevator, when you have the positive assurance that it is impossible to "Go Over the Top."

It can be furnished with either belt drive, or motor drive, as desired.

YOU ARE UNDER NO OBLIGATIONS IN WRITING FOR NET PRICES

When writing for prices, give us total height, measured from level of lowest floor to that of the highest floor, to which we will add ten feet to allow adequate landing height on top floor. If motor-driven type is wanted, give us a full description of the electric current available, and specify phase, voltage, and whether direct or alternate current.

OR A—

Barnard-Moline Safety Hand-Power Man-Lift

Fires in many small mills and elevators are frequently caused from over-heated bearings. Chokes on the top floor interrupt operation and require prompt attention. Many such fires can be averted, and other necessary duties performed more quickly and conveniently by installing a Barnard-Moline Safety Man-Lift, illustrated to the right, which is especially designed for use in small mills, grain elevators and warehouses.

Fire Insurance Companies endorse and recommend the installation of Man-Lifts and allow a proportionate reduction in rates where they are installed in grain elevators.

The Barnard-Moline Safety Man-Lift consists of a cab 28x30 inches by 7 feet 7 inches high, equipped complete with rope sheave, bump spring, wood guides, balance and counterbalance weights, also steel hoisting cable, hand and trailing ropes, all of proper length for height of cab travel.

It requires a space, approximately 3½x5½ feet on each floor, which allows sufficient room for getting on and off the cab. A space ten feet above level of top floor is required for clearance of sheave wheel on top of elevator shaft.

EQUIPPED WITH DOUBLE SAFETY STOP DEVICE

Operation of the Barnard-Moline Safety Man-Lift is very simple, and absolutely safe. To ascend, operator gets on cab, and after balancing his weight with the counterbalance weight presses down on foot lever at bottom of cab and gives the hand-rope a slight pull downward, or the reverse to descend.

When he has reached the required landing station, he merely removes his foot from the foot lever, which applies the brakes, stops and positively locks the cab in this position until the brakes are released by operator. Additional safety catches are provided at top of cab, which operate on the wood guides and stops the cab in case the cable breaks in operation.

WHEN WRITING FOR PRICES

Give us the measurement from lowest to the highest floors between which you wish the Man-Lift to travel. Prices will be quoted on either steel or wood, as desired.



Barnard & Leas Manufacturing Co.

MILL BUILDERS AND MILL FURNISHERS

Established 1860

Moline, Illinois

WELLER EQUIPMENT

The Better Kind of Grain Handling Machinery

Installed in your elevator will help you to operate at full capacity. Frequent shut downs and waiting for repairs dissipate your profit. Weller Made Machinery is made by men who know its application and the conditions under which it is to operate—it proves its merit because quality is built into it.

You owe it to yourself when building or making repairs to get our prices.



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We make a complete line of:

Apron Conveyors	Elevator Spouts
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Pan Conveyors	Chain
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Spiral Conveyors	Grain Driers
Trippers	Truck Dumps
Bucket Elevators	Wagon Dumps
Elevator Buckets	Track Hoppers
Elevator Boots	Power Shovels
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Power Transmitting Machinery
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Tell us the kind of equipment you are interested in. Catalogue showing illustrations also giving data that will help in making your selection will be sent. Experienced engineers are also at your service.



SAVES \$3408 A YEAR

HANDLING COAL WITH WELLER MADE EQUIPMENT

M. J. Cahill & Co., Boston, Mass., says:—

Our Weller Bucket Elevator has proved the finest system of handling our coal. With this equipment we unload a 50-ton car in less than two hours; in the past month and a half it has handled 50 cars of coal and on the average it will handle about 12,000 tons or 240 cars a year.

Coal arrives at our yard in hopper-bottom cars, from which it is dropped into a hopper beneath the track. From this hopper it is fed by a reciprocating feeder into a boot—and the Weller Buckets turn into this boot, take the coal out and elevate it about 35 feet to a trough from which it goes to various bins through 5 chutes. This system causes no breakage of coal, and we handle nut, egg, stove, soft, and pea coal.

Formerly, we used a portable belt conveyor. This method necessitated loading our wagons by hand and required trimming at the bin, both running into considerable expense. In fact, our figures show a cost of \$19.20 a car or \$0.3840 per ton for handling with the belt conveyor, while with our Weller System our cost is only \$5.00 per car or \$0.10 per ton. A saving each year as a result of the Weller installation of \$3,408. No trimming is necessary with this equipment.

Our Weller Bucket Elevator has been satisfactory in every way. It has given no trouble—and the dealer service could not be improved. It is economical to operate and the machine is constructed of heavy material that wears. Everything is sturdy and well built.

IF YOU HAVE A COAL OR MATERIAL HANDLING PROBLEM, WRITE US

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Indianapolis—Your Market

Indianapolis is known as the largest inland railroad city in the country and is the natural destination for shipments of grain from Indiana, Illinois, Ohio, Michigan, Wisconsin and states adjoining.

Its geographical location together with its railroads radiating to all sections of the country, makes it a logical outlet and distributing point to the East, South and Southeast.

These splendid railroad facilities assure quick handling of shipments with prompt returns on same.

Indianapolis also takes a natural



The Indianapolis Board of Trade

pride in having the largest corn mills in the country which, together with its flour mills and vast array of manufacturing industries, creates an exceedingly large local consumption of wheat, corn, oats, rye and hay annually.

This local and foreign demand makes for top prices on all shipments.

The market's adequate weighing facilities, its efficient inspection department, and increased elevator storage and drying equipment makes Indianapolis more and more important each season as a market for shippers and buyers of grain, hay and feeds.

Route your grain and hay to any of the following firms, all devoted to your interests and all members of the

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BERT A. BOYD GRAIN CO., Grain Commission

BINGHAM GRAIN COMPANY, Grain Merchants

CLEVELAND GRAIN & MILLING CO., Grain Commission

P. M. GALE GRAIN CO., Grain, Feed

DALE MILLER GRAIN CO., Receivers and Shippers

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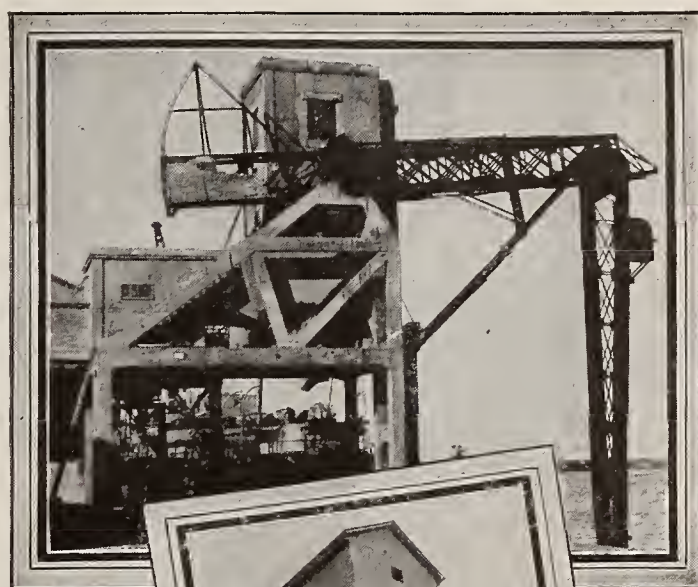
WEBSTER MARINE LEGS

WEBSTER MARINE LEGS are the most successful form of installation for efficiently handling the grain from the ship hold to the elevator with the greatest facility. They are sturdily built and mechanically correct in design, thus insuring years of reliable and dependable service.

The extensive operation of Webster Marine Legs in some of the largest grain elevators in the United States, Canada, and foreign countries, proves their adaptability.

Webster Grain Handling Equipment, not only includes marine legs, but a complete line of equipment: Belt Conveyors; Trippers; Elevators; Buckets; Power Transportation Machinery; Loading Hoppers; Power Shovels; Spouting, etc.

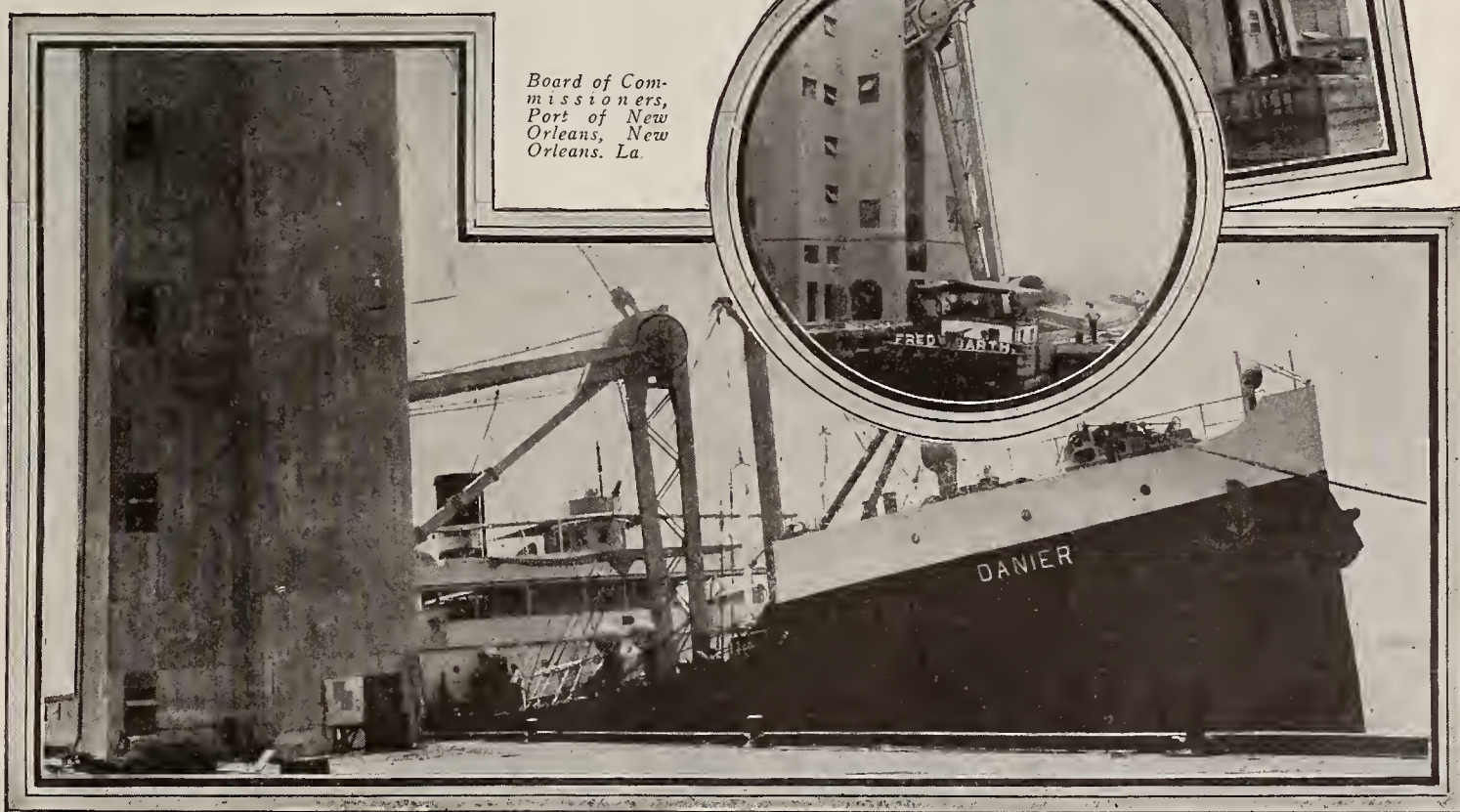
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THE GATEWAY TO THE SOUTH AND EAST

Has the "square deal" plugging system for hay.

Has reconsignment and transit privileges and other favorable points which insures most successful handling of grain or hay shipments.



Home of the Cincinnati Grain and Hay Exchange

Is the terminal point for 200,000 miles of railways and therefore a convenient shipping point for the country dealer, and local buyers are enabled to distribute all products quickly and to best advantage. Has weighing and inspection service second to none and up-to-date grain and hay merchants constantly safeguarding their patrons' interests.

Those are just a few of the reasons why you should ship your Grain and Hay to Cincinnati. Ship to any of the following responsible grain and hay firms, all members of the

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SIX ELLIS DRIER UNITS INSTALLED, C. & N. W. ELEVATOR, CHICAGO
OPERATED BY ARMOUR GRAIN COMPANY

WHY YOU SHOULD SPECIFY ELLIS DRIERS

Because the Ellis Drier has earned an unimpeachable reputation for producing a product supreme in quality.

By that we mean the original lustre and color of the grain is retained, it is free from cracked, discolored kernels and of great importance the grain is evenly dried and thoroughly cooled.

To the practical grain man who is familiar with Federal Grain Grades and their severe penalties for damaged grain, the above facts are of surpassing consequence.

But what is the reason for the superior quality of Ellis Dried Grain? Simply this:

- (1) Thin grain layers of even thickness throughout the length of the grain column— $4\frac{3}{4}$ inches to be exact. That means intensive air circulation about every kernel of grain.
- (2) Double Pressure System of air circulation which means the grain layer is dried on both sides at the same time, producing an evenly dried and thoroughly cooled product.
- (3) Woven wire cloth construction in both drier and cooler, which prevents the grain from becoming overheated in the drier—a common cause of discoloration and parching of the product.
- (4) All wire surfaces which support the grain are vertical. This construction prevents the possibility of the mesh in the wire cloth becoming filled with oats and dirt with consequent reduction in the efficiency of the drier.
- (5) A continuous feed system which is remarkable in its ability to feed the grain evenly through the drier and cooler. An additional reason for even drying and thorough cooling results.

Add to the above, a knowledge of design backed by 25 years of grain drying experience and you have the basis for our claim that Ellis Dried Grain is an incomparable product.

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CONSTRUCTING ENGINEERS

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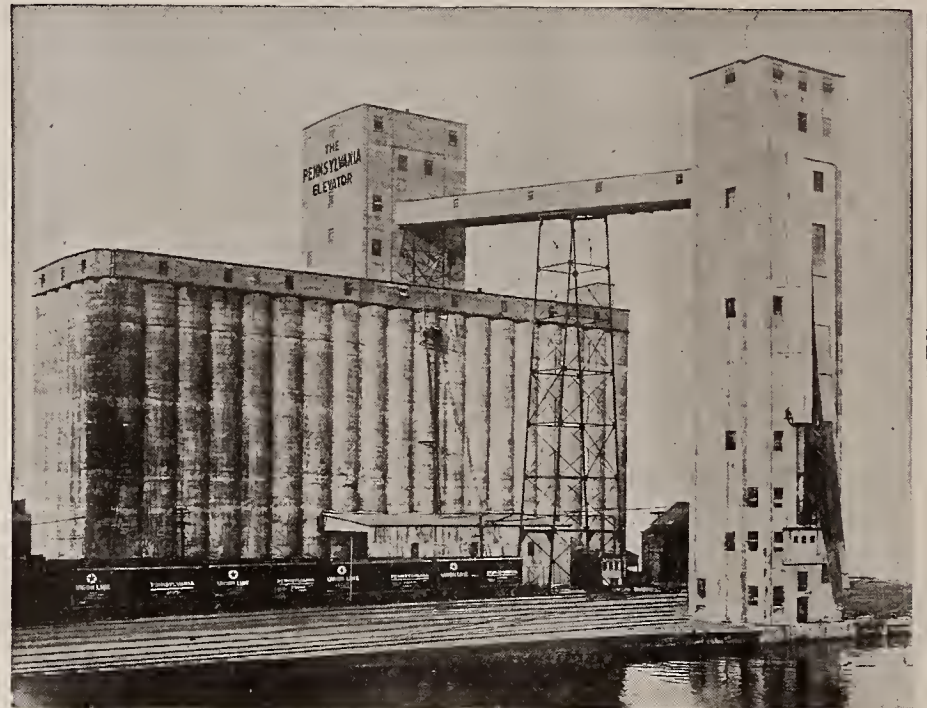
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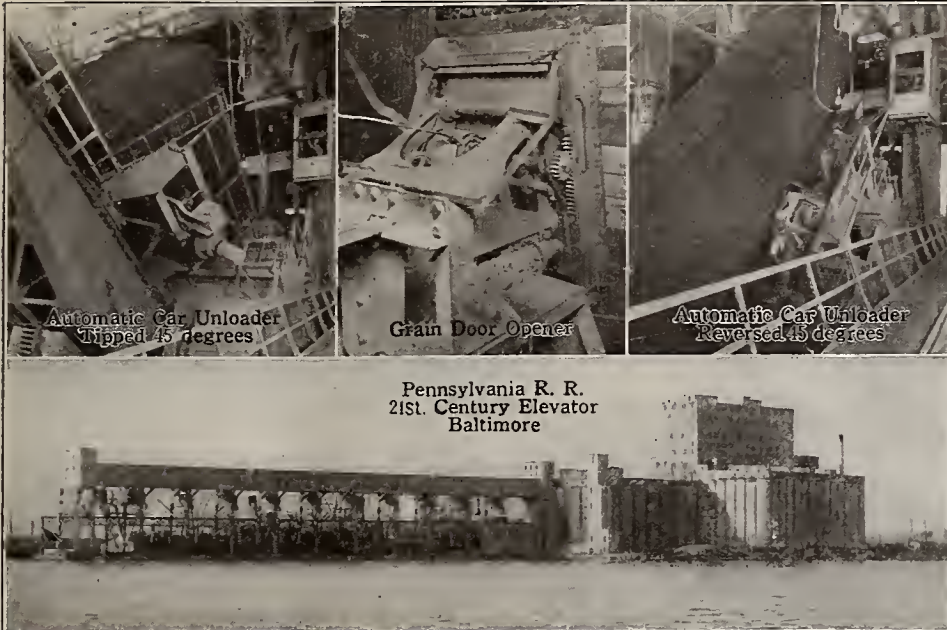
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Grain Elevators

W. R. SINKS
Manager

In all parts of the world

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We have built for many of your friends.
Eventually we will build for you.
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COUNTRY GRAIN ELEVATORS****Our long experience as a builder of elevators insures you an
up-to-date house. Write today.****Board of Trade Building,****INDIANAPOLIS, IND.****Burrell Engineering & Construction Co.****Designers of Grain Elevators, Flour
Mills and Associated Buildings****327 South La Salle Street****Chicago, Ill.****Grain Elevators****Flour and Feed Mills****Warehouses**

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Bluefield, W. Va.

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You eliminate future costly changes and expensive annual repairs when you have our experienced Elevator Builders handle your work. And you will get a plant combining the maximum efficiency in operation at a lower cost than any other way.

Backed by over a quarter of a century of experience building for the Milling and Grain Trade, we are in a position to effect every known economy in your building and at the same time give you a plant properly planned and properly built. Let us help you on your building problems.

Write us for estimates and sketch plans which we furnish without charge.

THE SPENCER CONSTRUCTION Co.**Contracting Engineers****Builders for the Milling and Grain Trade
Garrett Building****Baltimore Md.**



Manchester Ship Canal Elevator
Manchester, England
Capacity 1,500,000 Bushels
Completed 1914



Buenos Aires Elevator Co.
Buenos Aires, Argentina
Capacity 750,000 Bushels
Completed 1920



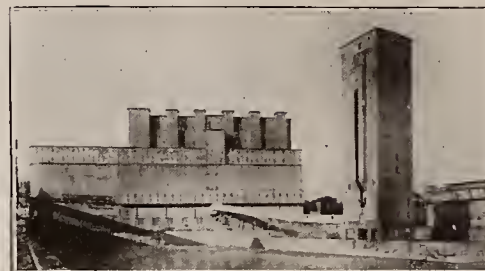
John S. Metcalf Co. Grain Elevator Engineers



Chicago & North Western Railway Elevator
South Chicago, Illinois
Capacity 10,000,000 Bushels
Completed 1920

OFFICES:

Chicago, Illinois, - - - 108 S. La Salle Street
Montreal, Canada, - 54 St. Francois Xavier Street
Melbourne, Australia, - - 395 Collins Street
Buenos Aires, Argentina, S. A., 639 Calle Maipu



Harbour Commissioners Elevator No. 2
Montreal, Quebec
Capacity 2,600,000 Bushels
Completed 1912



Sydney Terminal Elevator
Sydney, Australia
Capacity 6,400,000 Bushels
Completed 1921



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Built Elevators
Assure You
Economical Design
First Class Work
Efficient Operation
and
Satisfaction
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One of the Modern Houses Which Has Made a Record
for Rapid and Economical Handling
CONCRETE CENTRAL, BUFFALO, 4,500,000 Bu.



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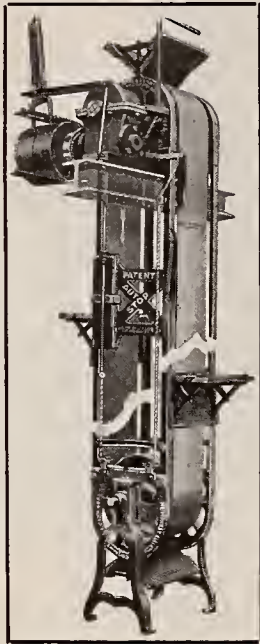
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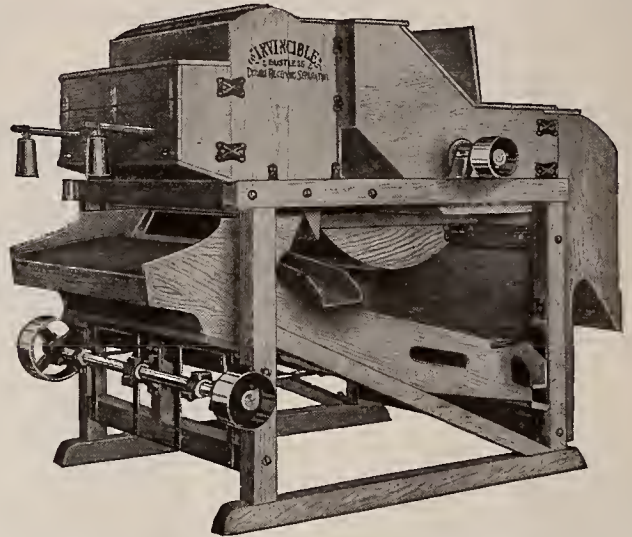
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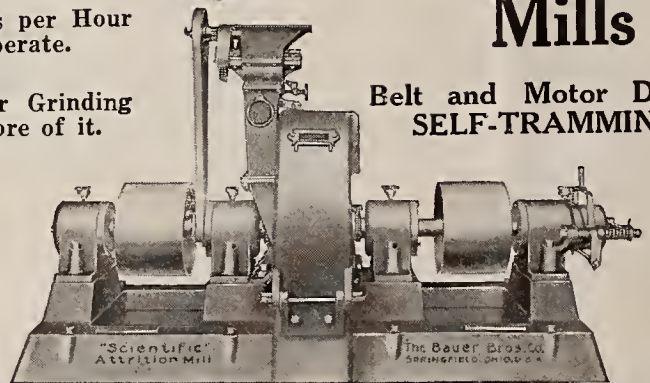
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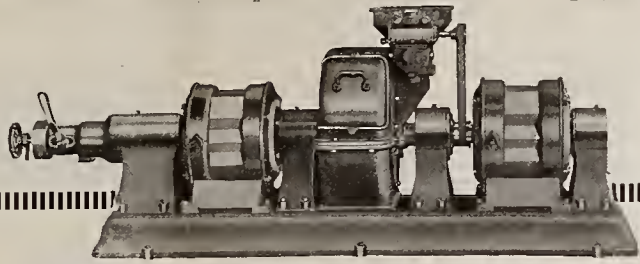
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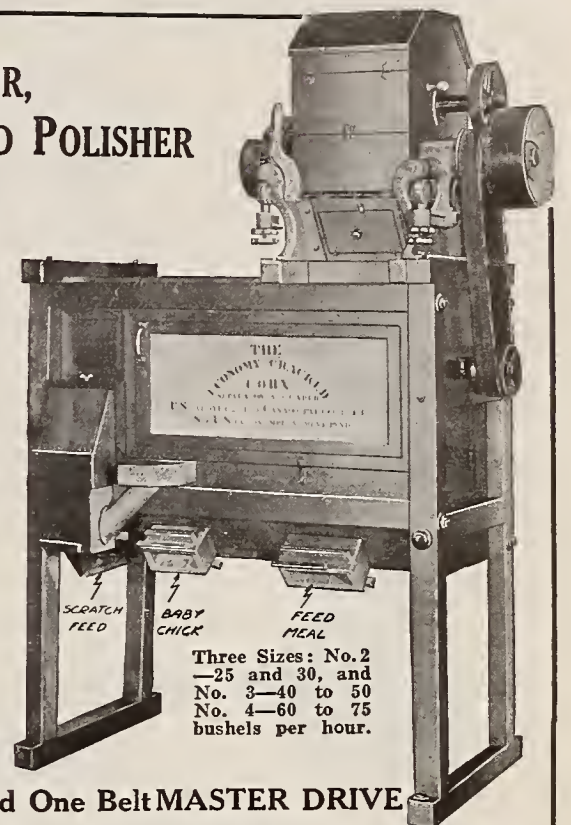
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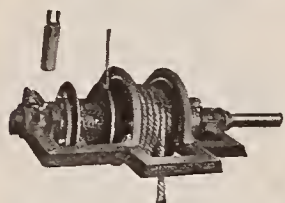
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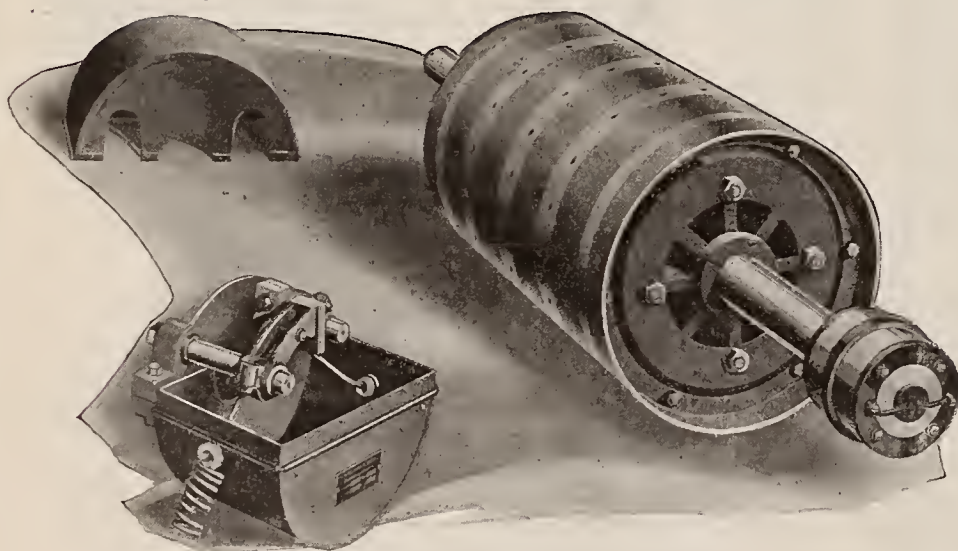
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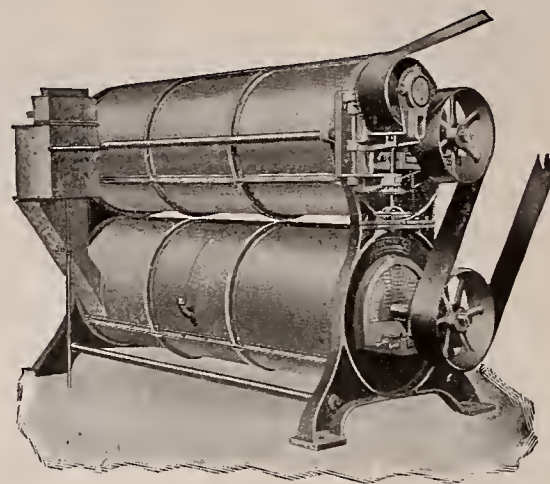
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—that during the half century of our Building Flour and Feed Mill Machinery, we have been able to maintain the same policy: "One price to both large and small buyers with concessions to no one, and the most highly developed and economically operated line."

Also thankful that we have received such a goodly share of the business from flour and feed millers; grain dealers and those who have installed Self-Rising Flour Equipment and Blending Machinery.

Again are we thankful that so many good millers have striven so earnestly to "make bread more nearly a perfect food" by washing the wheat, eliminating the crude fiber, and producing a most even granulation.

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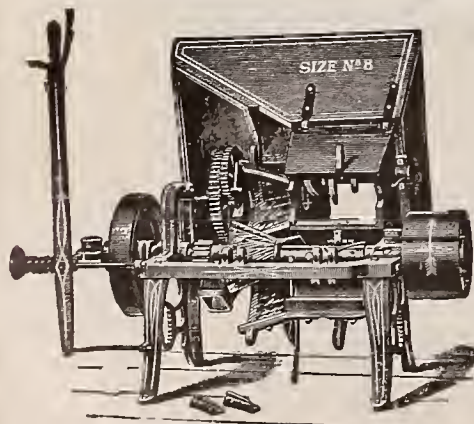
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Crush and Grind ear corn, husked or unhusked, alone or mixed with any kind of small grain in any desired proportion. Reduce the material to any fineness desired for feeding purposes.

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Overtime Service with Morse Silent Chain Drives

Great Responsibility of Crisis at Baltimore Accepted by the Western Maryland Elevator, One of the Most Efficient Export Houses on the Atlantic Coast

WHEN the disastrous fire of July 2 destroyed the two Baltimore & Ohio elevators at Baltimore, it appeared impossible that the port could handle the export business offered. Both the B. & O. elevators had records of over 25,000,000 bushels of grain handled in a single year, and the volume that would normally come to these houses would have to be accommodated elsewhere.

The flames of the burning structures had not been extinguished before B. & O. officials had made an arrangement with the Western Maryland Railway to handle all B. & O. grain cars through that railroad's mammoth structure at the Port Covington terminal. This was asking a great deal, even of a 4,000,000 bushel house. It was not so much a question of capacity, as it was of handling, but the elevator was built for speed and service and is electrically driven. There was power enough in the 52 Allis-Chalmers motors ranging from three to 500 horsepower each; motors have reached a high state of perfection and are more or less standardized to conform to every new development in electric power. But power transmission is not standardized. There are a dozen widely current ideas of what is best. In a crisis such as at Baltimore faced, however, theories and experiments are not enough to go upon. The port could not afford to

000 bushels per day. There are five elevator legs, two for receiving and three for shipping, each with a capacity of 15,000 bushels per hour.

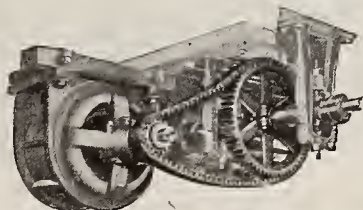
In the original house there were 22 belt conveyors aggregating 13,000 feet of conveyor belting, and the several units are distributed as follows: Eight conveyors on the bin floor, four in the galleries, and 10 in the basement. The distributing conveyors in the galleries and the shipping con-

The two lines of bins supplied by these conveyors are also known by those names, so there is no chance of directions being mistaken, even when given over the phone. Throughout the house a system of colored lights indicates the route of a parcel of grain, so no confusion can exist once it is started on its way.

The house is equipped with a Morris Drier and a two-unit Hess Drier. An unusually complete and thorough dust collecting system keeps the house free of the dangerous dust, discharging into a dust house at some distance from the elevator, or directly into cars, after first going through a separator that takes all light and broken grain from the dust. Five Fairbanks Hopper Scales, one at the head of each leg, takes care of the weights, and grain is cleaned over two Invincible Cleaners that can handle 144,000 bushels per day.

The shipping gallery paralleling the dock can reach five steamers at one time. There is a depth of water of 30 feet at low water so that vessels of any size can berth and receive full cargoes. Three ordinary boats can be loaded in a day of 10 hours and it is unlikely that any steamer will have to wait for its cargo.

This will only be possible with the full coordination of every unit of the house, and this coordina-



MORSE DRIVE FROM SUSPENDED MOTOR

veyors in the basement are, of course, extended by similar units in the new annex. A marine leg with a capacity of 3,000 bushels per hour, is installed to take care of bay boats that bring bulk grain grown on the shores of Chesapeake Bay.

The car unloading equipment is particularly efficient. Each of the eight unloading sinks has adjacent to it a Webster Self-propelled Unloader, each equipped with a Clark Power Shovel. A line



WESTERN MARYLAND ELEVATOR AT PORT COVINGTON, BALTIMORE, MD.

take chances on the failure to transmit the energy of a motor to the working unit which it controls. It is significant, then, that the elevator selected to bear the enormous burden imposed, is equipped with Morse Silent Chain Drives from all the motors. Through years of experience Morse Drives have established a reputation of holding up under strains which would be too much for most forms of transmission. Apart from their economy of operation, they are recognized as being the most faithful and uncomplaining servants of man, and they have proved their worth in many critical junctures similar to the one at Baltimore.

In every other respect, also, the Western Maryland Elevator is equipped to handle its responsibility. The house originally had a capacity of something over 2,000,000 bushels. There has just been completed a storage annex, bringing the total to 4,000,000 bushels, and plans are under way for another enlargement which will ultimately give the house 6,000,000 bushels' capacity. The house and the storage annex were built by James Stewart & Co., Inc. The receiving capacity is 240 cars per day, and the shipping capacity is 720,

of cars is shunted along the continuous track sinks and no spotting of cars is necessary, neither has a car to be uncoupled and pushed away from another car to arrive at an unloading sink. The string of cars stands coupled together on the unloading track and a Webster Unloader, moving under its own power, runs alongside a car. The grain is speedily pulled out, after which the unloader travels along to another car. On each of the four unloading tracks there is room for 40 cars set for unloading and for 40 empties beyond the sink, so that there is little chance of cars waiting to unload so long as there is storage capacity in the house.

Another feature of the receiving system which makes for efficiency by the elimination of errors, is that the receiving conveyors, instead of being known by number or letter, are given names; one is known as "Texas" and the other as "Baltimore."

tion depends absolutely on the unfaltering service of the Morse Silent Chain Drives. Capacity, equipment, and elevator design would be impotent to meet the present crisis. Only the application of power when and wherever wanted will serve the need of the hour. The elevator accepted its responsibility with the utmost confidence, for it knew the capability and dependability of the Morse Drives. And it knows, too, that the scientific construction of the silent chain delivers every ounce of its rated power without the slip and creep attending the use of belts and without the wear and upkeep expense of ropes. The chain drive has all the flexibility of belts and is at the same time as positive as a gear. It works silently, efficiently, dependably, and there is reason for the greatest engineers specifying it in their equipment program. The drive does most for the least. With an elevator thus equipped to handle export grain Baltimore is in a position to handle

efficiently all the grain that is tributary to it, without fear of disappointing either the shippers or the exporters of grain who elect to take advantage of the port's favorable rates and facilities.



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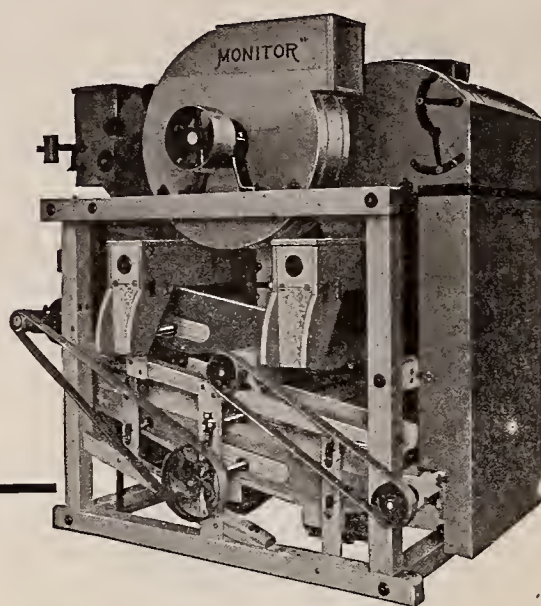
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Eagle Mills, Pocomoke, Md.

If they are, make it a point to go to their plant and see the 1922 model MONITOR Cracked Corn Grader, at work. See what it does, how it does it. It will show you the possibilities in making cracked corn and the extra profit there would be in making "your own" in your own plant.

The machine will also show you how to make it right—without waste—everything saved and three as pretty grades of cracked stock as can possibly be made.

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A monthly journal devoted to the elevator and grain interests.

Official paper of the Grain Dealers' National Association and of the Illinois Grain Dealers' Association.

Established in 1882.



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Subscription price, \$1.00 per year.
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Established in 1882.

VOL. XLI

CHICAGO, ILLINOIS, NOVEMBER 15, 1922

NO. 5

A Texas Mill Elevator with Unusual Features

Pioneer Flour Mills of San Antonio Builds Elevator, Carefully Planned to Serve Its Particular Needs, and Including Several Features of General Interest

THE southwestern part of the United States is pressing the Northwest closely as the milling center of the country. This has been a development of comparatively recent years, in fact since the introduction and successful cultivation of Hard Winter wheat, which came from Russia, although it had the name of "Turkey." Texas has its full complement of milling capacity and boasts some fine plants which turn out a high grade of flour, much of which is well known abroad as well as throughout the Southern States. Among these mills the Pioneer Flour Mills of San Antonio, Texas, ranks high. It is one of the oldest and best known milling companies of the state and has shown, from its beginning, a disposition to take advantage of all the advances in milling and grain handling. This has been again exemplified in the last year by the addition to its plant of a new concrete elevator which has many features of interest, not only to millers, but to practical grain men as well.

The new elevator was planned and erected by the Burrell Engineering & Construction Company of Chicago. It is 43 feet 8 inches square and 198 feet high, and this is, as far as we know, the tallest building in San Antonio. Certainly it is the highest in the vicinity and stands like a memorial shaft to the industry and progress of the Southwest. This height is emphasized by a tall electric sign on top which can be seen for miles and makes a splendid advertisement for the company's products.

Although the company had considerable storage capacity in steel tanks and receiving equipment for taking care of grain, the new unit was made the principal part of the receiving and grain storing system and the conveying equipment has been changed to conform to that fact.

The elevator is equipped for the rapid handling of grain. The scarcity of cars has made this feature of every modern house of paramount importance, for only by the most prompt handling of every car at initial point or destination can the rail situation be relieved in any way. The house has a double car receiving hopper with two legs of about 4,000 bushels capacity each. The receiving leg empties into a 2,000-bushel scale hopper

and is then distributed from the scale through a 12-inch Mayo Spout, a duplicate of which serves the second leg. Provision has been made for the installation of two more legs should the increase in storage capacity warrant it.

The house is so arranged that grain can be received from either cars or wagons. While there is much wheat grown in the vicinity of San Antonio which comes direct to the mill, this local wheat falls far short of the requirements of the

tance to a dust explosion, and when there is no resistance an explosion spends itself with comparatively little damage provided that the structure is fireproof and the initial blast reaches no fuel which will ignite quickly. The disastrous elevator explosions in every case have been in places where the dust-laden air was closely confined. The Pioneer company has wisely guarded against this contingency so far as possible.

The bin space is divided into small units for the reason that the elevator not only serves the mill for storage, but is also used as the grain tempering department, so that when the wheat goes from the elevator into the mill it is ready for the final scouring just before going to the rolls. The tempering process is accomplished by first wetting the wheat in a double 14-inch galvanized screw conveyor which discharges into nine tempering bins. From these bins and from four additional bins, the grain is discharged through metal spouting to 18 Draver Feeders placed on top of two 9-inch screw conveyors, one going to the old mill and one to the new mill. The spouting from the nine tempering bins as well as the four separate bins is so arranged that it can spout to all feeders on either conveyor or through by-pass spouts back to the leg. Between the above mentioned 9-inch screw conveyors another 9-inch screw conveyor is placed which carries corn from three bins over to the feed and meal plant. In the Pioneer Mill corn grinding, both for meal and feed, is an important part in the activities of the plant. This is true of most southern mills, for they have a far more active demand for corn goods to meet than the great

majority of northern mills have.

The placement of machinery gives ample room to walk about without danger, and in fact a great deal more machinery could be installed on the work floor without inconvenience. There is a feeling of roominess in the plant rather unusual in an elevator of this sort, in spite of the elaborate system of dust collection and vacuum sweeping which necessitates a rather complicated collection of air exhausts. All the sheet metal work in the elevator, of which there is a considerable amount, was furnished by the Weller Metal Products Company. The elevator belting is the well known



THE PIONEER ELEVATOR AT SAN ANTONIO, TEXAS

plant and the greater proportion of the grain used by the mill is brought in in cars. All the grain as it is received is cleaned over a No. 10 Invincible Cleaner, which can handle both corn and wheat.

There are several features of interest in the house. Its great number of windows; its many small bins; and its generous provision for machinery space. The window space was particularly specified by the milling company for two reasons; to provide as much light as possible, which is, perhaps, more necessary where grain is made ready for the actual milling process; and as an element of safety. Windows offer far less resis-

"Levator" brand, made by the Hamilton Rubber Manufacturing Company, while the conveying machinery was made by the Weller Manufacturing Company. The employees' elevator, which operates between the work floor and the head floor, was furnished by the Barnard & Leas Manufacturing Company, and a combined steel and concrete stairway leads from the basement floor to the top of the roof.

The machinery of the plant is motor driven, the transmission being with silent chain drives with the exception of the cleaner, which is driven with a rope drive. The leg heads and counter shafts are furnished with SKF Ball-bearings, which materially decrease the amount of power needed. The house is exceptionally complete in all details and is a credit to the milling company and the builders.

An interesting feature of the new elevator is the cornerstone which was laid during the course of construction with appropriate ceremonies. The stone was one of the original mill stones used in



CORNERSTONE OF THE PIONEER ELEVATOR

the old mill. It was carved with the names of the officers of the company and some of the operatives, as shown in the illustration, and will prove an enduring testimony to their participation in the success of the company. While mill stones have been used before as cornerstones of mills, this is the first instance of which we have record of such a stone being used in an elevator. Its use and the inscriptions also typify a tendency more common in the South, perhaps, than in the North, of making the entire working force a big family, all serving the firm with a personal interest, and being recompensed by a security in their positions greater than usually found in large plants operated on a strict commercial basis. The stone is a record of achievements of which the company is justly proud.

THE BARGE CANAL

It is of course gratifying to all active business men, and particularly to dealers in grain, feed, etc., nearly all over New York that the great barge canal, has had an excellent opportunity to show its great usefulness. Briefly, the great scarcity of cars and engines has almost paralyzed transportation by railroads and as a consequence great congestion has prevailed at various terminals, but especially in the case of Buffalo where huge quantities of grain have arrived via the lakes. This naturally compelled many to turn to the Erie Canal for relief, and as the demand for boats was so unprecedentedly active, the supply soon became exhausted. In fine every boat available was immediately taken and hence rates from Buffalo to New York jumped up with startling celerity, grain going as high as 15 cents a bushel or 5 or 6 cents a bushel premium over the all rail rate. In pre-war seasons the price for wheat via canal ranged from 1 7/8 cents to 5 cents per bushel.

It is particularly unfortunate that in some parts

of the canal the depth of water was inadequate and that dredging on a large scale was urgently needed. Such dredging it was asserted would greatly facilitate the movement of larger boats that could be used immediately to great advantage by increasing the depth of water. Of course the high rates paid for canal freight meant that exporters and others were in urgent need of the grain and therefore could not wait for shipment by rail as the congestion and scarcity of rolling stock made rail delivery so extremely uncertain as to be far more risky than by canal.

It was also pointed out that one of the reasons why canal rates had gone up so unusually high was the fact that the demand had been stimulated by the still higher rates from Buffalo to Montreal, namely 17 to 17 1/2 cents. Some reliable authorities asserted that the demand for canal boats had been so urgent that approximately 1,000 more boats could have been used if they had been in existence. Furthermore it is the consensus among well-informed dealers that the need of boats will be almost as great next season as it is now, as the prospect is considered decidedly bad for anything like an adequate supply of cars and engines. One prominent authority has stated publicly that it would require \$2,000,000,000 and 10 years before the transportation facilities on the railroads of the country would be in a normal condition such as prevailed previous to the war.

GRADES FOR GRAIN SORGHUMS

United States grades for grain sorghums are now in use in all the principal grain sorghum markets, a survey by the United States Department of Agriculture shows. Federal grades were formulated by the Department in 1921 in response to an urgent demand from the trade. At present inspections of grain sorghum shipments are not supervised by the Federal Department, inspectors being employed by state grain inspection departments, chambers of commerce, boards of trade, and in some cases inspectors operate independently on a fee basis.

"In the past the lack of definite grades for grain sorghums which could be uniformly applied at the various markets was a serious handicap in marketing the crop," says the Department. "Each market made its own grades and interpretations dictated by local conditions. The practice proved unsatisfactory because it did not promote uniformity between markets and reacted unfavorably against the price of the grain. The importance of formulating descriptive grades which could be applied alike by all markets is seen in the fact that production of grain sorghums in recent years in the United States has ranged from approximately 115,000,000 to 137,000,000 bushels annually, depending somewhat upon the acreage planted and seasonal conditions. Most of the crop is consumed on the farms where grown

Kaffir, Milo, Durra, Feterita, Darso, Freed Sorgo, Brown Kaoliang, Schrock Kaffir, and Shallu. Grain sorghum of one class that has more than 10 per cent of another mixed with it, is classed "Mixed Grain Sorghum." Three classes, Kaffir, Milo, and Durra, are divided into two sub-classes on the basis of color of kernels. Sub-classes are recognized because these classes contain both white and colored kernels. White kernels are preferred for some uses and colored kernels for others.

Each class or sub-class is divided into four numerical grades (1, 2, 3, and 4), dependent upon condition and general appearance, test weight per bushel, moisture content, percentage of damaged kernels, other grains, and foreign material and cracked kernels. Grain sorghum failing to meet the specifications for any one of the four numerical grades is graded "Sample Grade."

Grade specifications for grain sorghums are contained in Department Circular No. 245, copy of which may be obtained by addressing the Department of Agriculture, Washington, D. C., or any office of Federal Grain Supervision, in the various field offices.

WHY THE DEEP SEAWAY IS NEEDED

BY JOHN R. MAUFF
Secretary Chicago Board of Trade

A drive is under way to carry the St. Lawrence deep waterway project to a successful conclusion. The Chicago Board of Trade is taking an active part in the campaign. The reasons are obvious. The waterway will benefit the grain farmer to a tremendous degree. It will benefit all western farmers and merchants. It will benefit the entire West, for it will remove the hobbles on mid-western industrial development and likewise permit further agricultural expansion.

The St. Lawrence deep seaway project looms a beacon on the murky transportation horizon. Economists term it the premier waterway movement of the age. It would make every lake port a seaport. Down an open road to the sea would move unhampered the West's bountiful contribution to the world's bread basket. Down this water lane, too, would go fleets laden with slaughtered cattle, hogs and sheep, dairy products, wool, iron ore, copper and coal. (Experts say that such relief for the overburdened railroad would double the efficiency of our transportation system.)

It has been clearly shown that full development of the inland seaway would add from 5 to 10 cents a bushel to all grain grown in the great productive area. This is based on surveys by transportation experts. It is estimated that a 5 cent a bushel saving on transportation cost to European countries would add \$183,000,000 to the agricultural income of the Central West.

In the district that would benefit directly by the deep seaway are 16 states that pour part of their

UNITED STATES GRADES FOR GRAIN SORGHUMS TABULATED AND ABRIDGED

Grade No.	Condition and general appearance.	Minimum test weight per bushel.	Maximum limits of—						
			Damaged kernels.			Other grains	Foreign material and cracked kernels.		
			Mois- ture con- tent.	Heat damaged (grain sorghums or other grains).	Total.	Non- grain sor- ghums.	Total.	Sand, dirt, and finely broken kernels.	Total.
1	Shall be cool and of natural odor, and good color.....	Pounds. 55	Per cent. 14	Per cent. 2	Per cent. 0.2	Per cent. 3	Per cent. 1	Per cent. 3	Per cent. 0.5
2	Shall be cool and of natural odor, and may be slightly discolored	53	15	5	.5	5	3	6	1.0
3	Shall be cool and of natural odor, and may be discolored.	51	16	10	1.0	7	5	10	2.0
4	Shall be cool and may be musty, sour, or badly discolored	49	18	15	3.0	10	10	15	3.0

SAMPLE GRADE: Shall be white Kaffir, Kaffir, yellow milo, milo, white durra, feterita, darso, freed sorgo, brown kaoliang, schrock Kaffir, or shallu, respectively, which does not come within the requirements of any of the grades from No. 1 to No. 4, inclusive, or which has any commercially objectionable foreign odor, or is heating, hot, or otherwise of distinctly low quality.

Grade No. 1 for white Kaffir and white durra shall consist of 95 per cent or more of white kernels, including other classes and nongrain sorghums. Grade No. 1 for yellow milo shall consist of 95 per cent or more of yellow kernels, including other classes and nongrain sorghums.

and in adjoining territory, but a considerable proportion is offered for sale at distant markets."

Under the United States grades, the grain sorghums are separated into nine commercial classes:

agricultural products into Chicago. These states produce three fourths of the wheat of the country, and more than 400,000,000 bushels of grain is handled every year by the Chicago Board of Trade. In

these same states also is produced 70 per cent of the corn, and half the cattle, hogs, horses, butter, eggs, cheese and wool. They mine 85 per cent of the iron ore, 40 per cent of the copper and coal, 75 per cent of the zinc and 45 per cent of the lead of the country.

Chicago is the focal point of the great production area, a world rail center, handling in its terminals 15,000,000 carloads of freight a year. It is within a night's ride of 50,000,000 persons. Thirty-nine railroads converge there. No train passes through the city. It either starts or finishes its trip. Its freight burden is switched and transferred.

The entire West has awakened to the vital importance of shoving the seaboard to the heart of the continent and making every lake port a seaport. Determined to do its part toward carrying out the big program which means so much to future progress, the Chicago Board of Trade has selected a committee to represent the grain trade. It is composed of George S. Bridge, chairman, A. V. Booth, George E. Marcy, J. C. Murray and E. L. Glaser. The committee has taken up its work in Chicago.

On the subject of the waterway, Julius H. Barnes, president of the Chamber of Commerce of the United States, and head of the war-time United States Grain Corporation, recently addressed the following letter to Senator Frank B. Kellogg of Minnesota. "Just for illustration of what the western country suffers when transportation becomes restricted and how much we ought to rely on the enlarged St. Lawrence Waterway, please note these facts, at this time of crop-moving pressure.

"The dates given below are the last engagements made to move grain from Buffalo to New York by the four trunk lines that serve Buffalo to New York.

"Erie Railroad August 30

"West Shore Railway..... August 24

"Lehigh Valley Railroad..... September 1

"Lackawanna Railroad September 2

"That is, for two weeks now, there has been no way to engage rail transport between Buffalo and New York, from that great channel of movement.

"The effect of this on price is indicated as follows:

	Winnipeg, Chicago		Liverpool
	Oct.	Sept.	September
Sept. 1	.96- $\frac{3}{4}$	1.00- $\frac{1}{4}$	Nine shillings, thripence
Sept. 14	.93- $\frac{3}{4}$	.98- $\frac{3}{4}$	Nine shillings, five and one-half pence

"This means that the Liverpool market has advanced the equivalent of 2 $\frac{1}{2}$ cents per bushel, in the same period that the Chicago market has fallen 1 $\frac{3}{8}$ cents, and Winnipeg 2 $\frac{7}{8}$ cents per bushel; all of this influenced by the fact that the movement of grain through all channels is greatly restricted, with a considerable hazard against all contracts, by the closure of this principal channel of movement to New York."

Is not that alone sufficient reason for the entire West to fight and fight hard for the deep seaway?

FIGHT THE CHINCH BUG NOW

Farmers' throughout a large part of the Winter wheat territory should not overlook the fact that chinch bugs are more numerous and more widespread this fall than for the past several years; and unless the coming winter should prove unfavorable for them, or some means is provided to exterminate them, they are certain to do more damage next season than ever.

Chinch bugs hibernate over winter. They protect themselves by hiding under trash, dead grass, around the crowns of bunch grass, etc. Their winter home is, therefore, largely along fences, road sides, ravines, waste lands and pastures. Serious destructive outbreaks of the pest in wheat fields have been traced directly to the influence of shocks of corn allowed to stand in the wheat fields throughout the winter. The chinch bugs which flocked to these corn shocks the previous autumn, suitable quarters not being available elsewhere, were thus protected throughout the winter. During the following March and April, the bugs that have lived over winter come out of hiding and fly to the growing wheat or oat fields, where they deposit their eggs. Each female lays about 500 eggs, and

these hatch and begin doing their damage in about 60 days.

By harvest time a few of them may have wings, but the majority will not, consequently they travel "on foot" from the wheat or oats to the corn, Kaffir, sorghum or some other crop. After becoming full grown and doing a lot of damage, these bugs deposit another bunch of eggs for another brood, which will come along about 60 days later. It is the bugs of this second brood that live over winter, and which we must destroy now if we prevent their damages next season.

Kill the bugs this fall—prevention is the best cure. In the spring, female bugs that live over winter fly everywhere, depositing their eggs largely on growing crops of wheat and oats. It is therefore best that campaigns for destroying these bugs should be put on by whole communities, or better still by whole counties.

There are two general ways of destroying them in their winter quarters—by plowing and by burning; burning being far more effective than anything else.

Plowing: In badly infested fields of corn, Kaffir and similar crops, it is an excellent plan to harvest and pasture early and then plow before the ground freezes. Fall or early winter plowing usually proves best for winter planting; besides it destroys many chinch bugs that are hibernating in the

basis of the nationality of the growers, although the embargo could be used if the shippers of a certain commodity are located in a certain territory.

The Commission is also said to be giving consideration to the fact that Canadian railroads have now on American railroads a very large number of their own cars, which are assisting to relieve the shortage of grain carrying equipment complained of in many sections of the West.

GRAIN PRICES

(Grain dealers will find much of interest in Bulletin 1083 recently issued by the U. S. Department of Agriculture. The bulletin traces the farm and terminal market prices for wheat, corn and oats throughout the crop movement year 1920-21. In this survey it is easy to see why it was so difficult or impossible to make money on grain that year. Incidentally the year rather upset the favorite farm theory that terminal market dealers buy the crops in the fall when congestion makes the price low, and hold them until the price is high in the spring. The following chart shows how the 1920 wheat crop upset this procedure. The bulk of the sales were made at Minneapolis and Kansas City, so those cities are the controlling factors in the graph for "All Markets."

The slight rise in the December wheat price is

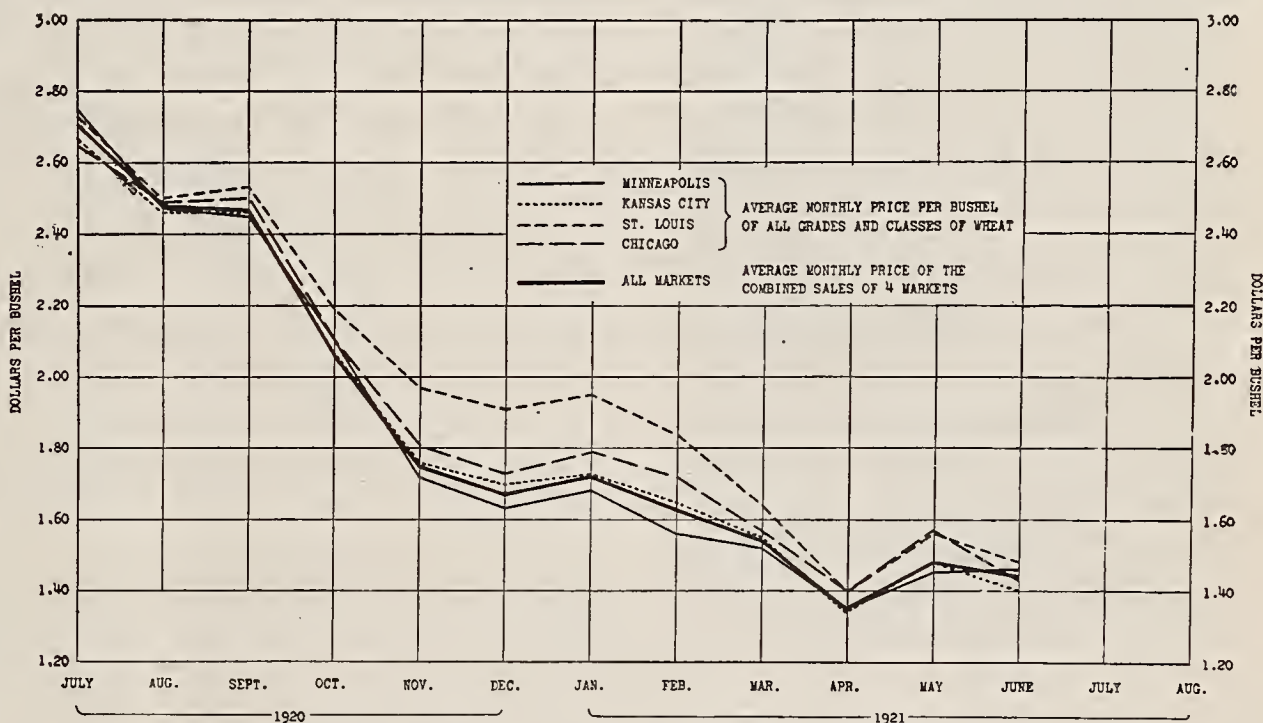


DIAGRAM OF WHEAT PRICES AT FOUR MARKETS DURING 1920-21

stalks, among the weeds, under trash or under freshly spread manure.

Burning: Burn or remove every possible hiding place. Burn when grass and weeds are dry and when there is very little wind. In order to burn close to the ground and insure killing a large percentage of the bugs, it is often advisable to back-fire and burn against the wind. Be sure to burn all bunch grass. By thorough burning between now and Christmas, bugs that are not destroyed by the fire will be exposed during the winter and many that remain will die before spring.

CANADIAN EMBARGO ASKED

Western grain shippers and the American Farm Bureau Federation have requested the Interstate Commerce Commission to embargo shipments of Canadian grain through the United States during the period of congestion on the rail lines east of Buffalo.

Large quantities of Canadian grain have been sent to our Atlantic ports in bond through Buffalo. As a result western growers find it impossible to get their grain through so that interior grain is discriminated against in price. The shippers say that if the Canadian grain were out of the way westerners could take advantage of port prices offered.

There is said to be some uncertainty, however, whether the Interstate Commerce Commission can legally embargo against shipment of grain on the

readily accounted for by the fact that at all markets car receipts dropped from 11,248 cars in November to 8,546 cars in December. The average difference between the farm and terminal price of wheat per bushel was 17.2 cents; and the total estimated farm value of the crop of wheat was 91.1 per cent of the terminal market value.

NORTH DAKOTA ELEVATOR OPENS

On October 30, the North Dakota state-owned and operated grain elevator and flour mill at Grand Forks were formally opened. Governor R. A. Nesotos pressed the button which started the first unit of the mill, but the elevator had already received about 33,000 bushels of wheat.

The plant, with its working capital, represents an investment of \$2,500,000, which means an interest charge of about \$125,000 annually. The mill is built for a capacity of 3,000 barrels per day, and the elevator will hold 1,000,000 bushels of grain. O. L. Spencer is manager of the mill and Mr. Simmons of the elevator. The latter has been instructed to solicit grain for the use of the mill and to accept grain for storage up to the capacity of the house. For the present the elevator will limit itself to this class of business, and as many small shippers as possible will be accommodated rather than a few large shippers. At the present time the elevator will not merchandize grain. Great hopes are entertained by Dakota Socialists as to what the plant will accomplish.

Sources of Error in Sampling Grain

An Analysis of various Grain Samples and Important
Conclusions Drawn from the Study

By W. L. FRANK and R. L. CAMPBELL*

THE importance of securing a truly representative sample is quite generally recognized. Variation in samples from the same lot of grain is usually charged against the sampler. Our investigations show that variations may occur in the laboratory due to the methods of cutting down the original sample to approximately 1,000 grams.

Our studies have covered the four principal grains

handled in the same manner that it would have been handled for the purpose of determining the market grade.

WHEAT

Dockage in wheat is often an important consideration. Likewise, "foreign material other than dockage" may at times be a grading factor. Only the former was considered in the studies made on

Table No. 1—Dockage in wheat, showing the variations resulting from different methods of sampling in the laboratory.

Sample Mark	Wt. in Kind Grams	True Divider Sample	First 1000 Grams	Rem. of Half Sample	Method A	Method B	Character of dockage
A	S.R.W. 3,000	4.20	0.00	0.00	-0.50	-0.40	Cheat
	H.R.W. 3,000	4.20	0.10	-0.20	-0.30	-0.60	Cheat
B	S.R.W. 3,000	4.10	0.10	-0.50	-0.20	-0.30	Oats
	H.R.W. 3,000	4.20	0.15	-0.90	-0.50	-0.40	Oats
C	S.R.W. 3,000	4.20	0.50	-1.70	0.60	-1.00	Corn
	H.R.W. 3,000	3.90	1.00	-1.80	0.70	-0.30	Corn
D	S.R.W. 3,000	4.00	0.10	-0.20	0.20	-0.20	Barley
	H.R.W. 3,000	4.00	0.20	-0.40	0.15	-0.40	Barley
E	S.R.W. 3,000	3.90	-0.90	1.60	-0.10	0.90	Fine dirt
	H.R.W. 3,000	3.80	-1.40	2.60	0.00	1.00	Fine dirt

handled at this market, namely, corn, oats, wheat, and grain sorghums. The factor or factors most likely to be affected by mechanical means, were selected in each case.

Failure to use the divider in reducing the size of the original sample was held to be such poor practice that it was not considered. In this way the study was confined strictly to comparisons between different methods of reducing original samples to 1,000 grams. The variations in methods of laboratory sampling employed in this study, approximate those found in the actual grading of grain.

METHODS OF SAMPLING

Four methods of laboratory sampling were used. They may be described as follows:

1. True divider sample: The original sample consisting of 1,500 to 3,500 grams, was divided so as to obtain approximately 1,000 grams in one pan. In each case the sample was so manipulated that the weight of grain in the divider pan did not vary more than 25 grams from the desired 1,000 grams. The sample was then made to weigh 1,000 grams by the addition or removal of grain.

2. First 1,000 grams: The original sample was divided once, and the first 1,000 grams out of the divider pan, was used in the determinations. Determinations were also made on the remainder of the sample left in the divider pan.

3. Method A: The original sample was divided once, and one portion of the sample poured from the divider pan into a large open-end grain sample pan, in such a manner that the grain flowed from the divider pan toward the spout end of the grain pan. The first 1,000 grams out of the grain sample pan were used in making the determinations tabulated under Method A.

4. Method B: The original sample was divided once as in Method A, but the grain was poured into the large grain sample pan so that the grain flowed toward the back end of the pan. The first 1,000 grams out of the grain sample pan were used in making the determinations tabulated under Method B.

We have accepted the true divider sample as the truly representative sample in making comparisons between methods. The differences between samples obtained by the different methods are expressed as plus (+) or minus (-) according to whether they are greater or less than those of the true divider samples. In this way the possibility for variation in results is easily apparent. A variation of the tenth from the true, is sufficient to admit of a change in grade.

APPARATUS USED

The regular grain grading equipment was used in making the determinations. Each sample was

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wheat, although the latter would probably be similarly affected by the method of sampling. Five kinds of dockage taken from market run wheat,

Table No. 2—Other grains and foreign material in oats showing the variations resulting from different methods of sampling in the laboratory.

Sample Mark	Wt. in Grams	True Divider Sample	First 1000 Grams	Rem. of Half Sample	Method A	Method B	Other Grains and or Foreign Material
A	1,500	12.50	-0.10	0.10	0.90	0.80	Wheat, Grain Sorg.
B	1,600	6.25	0.45	-0.59	0.45	0.55	Wheat, Grain Sorg.
C	1,500	6.00	1.10	-1.80	1.30	0.80	Corn
D	1,600	5.80	-0.40	0.66	0.05	0.90	Wheat—Barley Grain Sorg.
E	1,500	5.00	0.40	-0.80	0.80	0.00	Corn
F	1,500	3.00	0.40	-1.00	0.70	0.00	Corn
G	1,500	5.00	-0.30	0.20	-0.30	0.90	Fine light dirt
H	1,500	3.00	-0.50	1.20	-0.20	0.50	Fine light dirt
I	1,500	3.00	-0.70	1.00	0.30	0.80	Fine dirt
J	1,600	2.88	-0.26	0.45	-0.58	0.45	Fine light stuff
K	1,600	2.60	-0.60	0.73	-0.40	0.70	Fine light stuff
L	1,600	2.25	-0.45	0.75	-0.45	0.75	Fine light stuff

were mixed with representative samples of Hard Red Winter and Soft Red Winter wheat. The results of comparative tests are given in detail in Table No. 1 above.

The data in Table No. 1 shows that the dockage in only three samples out of 40 did not change as

half of 1 per cent in dockage as result of using incorrect methods of sampling in the laboratory. No less than 37 samples out of a possible 40, varied one-tenth of 1 per cent or more, while 8 varied as much as 1 per cent or more.

It appears that when other substances of approximately the same size, and of the same or lighter weight are mixed with wheat, the variations due to different methods of sampling are not large. However, when substances of either considerably larger or of much smaller size are mixed with wheat the variations as noted before are relatively greater.

OATS

Foreign materials in oats may directly affect the market grade, while foreign materials and other grains combined, may so reduce the per cent of sound cultivated oats as to affect the grade. Both were considered in our studies on oats, and the results of comparative tests are given in Table No. 2. The material used, and the quantities taken corresponded with those found in the grading of commercial grain.

Variations ranged from 1.80 per cent deficient to 1.30 per cent in excess on the basis of the amount present in the corresponding true divider sample. The range was not as great in oats as in wheat. However, the errors resulting from inaccurate laboratory sampling were such that the grade of a sample could be changed as much as two grades merely through the variations occasioned by the

method of sampling which is employed in the laboratory.

Forty-six samples out of 48 varied one-tenth of 1 per cent or more, as a result of using different methods of sampling. Variation in percentage amounts of materials present in oats, are influenced

Table No. 3—Foreign Material and Cracked Corn in Corn Samples showing variations resulting from different methods of sampling in the laboratory.

Sample Mark	Wt. in Grams	True Divider Sample	First 1000 Grams	Rem. of Half Sample	Method A	Method B	Character of Foreign Material, and Cracked Corn
A	3,330	6.20	-2.70	4.62	-2.20	1.30	Wheat—Grain Sorg. Crack corn
B	3,330	6.60	-3.40	5.16	-1.30	1.90	Wht., Crack corn
C	2,520	2.00	-0.50	3.30	-0.40	0.20	Crack corn
D	3,290	6.20	-1.80	3.84	-1.40	0.80	Crack crn., Gr. Sorg.
E	2,470	2.00	-0.65	2.85	-0.30	0.10	Cracked corn, oats
F	2,500	8.60	-1.30	5.00	-1.30	0.70	Wheat—Grain Sorg. Cracked corn—oats
G	2,800	2.90	-0.60	1.72	-0.60	0.95	Cracked corn
H	3,000	2.60	-1.20	1.80	-0.45	0.80	Grain Sorg—Wheat. Cracked crn., Milo—Cane seed
I	3,000	3.75	-1.05	2.45	-0.85	0.85	Cracked corn—Wht. Cane seed—Grn. Sor.
J	2,960	2.85	-0.65	1.53	0.15	0.75	Cracked corn—Wht. Cane seed—Kafir
K	2,700	2.70	-0.70	2.30	-0.35	0.90	Cracked corn Wheat—Kafir
L	2,750	5.05	-1.10	2.95	-0.45	0.45	Cracked corn Wheat—Grain Sorg.

a result of varying the method of sampling. Nine samples out of 40 varied less than two-tenths of 1 per cent, and 22 samples showed less than the corresponding true samples. The variations ranged from 1.80 per cent deficient to 2.60 per cent in excess as compared with the dockage in the respective true samples.

A variation of only one-tenth of 1 per cent may be sufficient to change the market grade as far as dockage is concerned. Nineteen samples out of 40 or only one less than half, varied less than one-

to a less extent by the kind of material than is true in the case of wheat. The per cent of material present did not materially affect the extent of variations which resulted from different methods of sampling.

CORN

The amount of foreign material and cracked corn present in commercial corn, often determines the market grade. This factor is largely mechanical. Both the kind and amount of foreign material and cracked corn was varied. The weight of the original

samples ranged from 2,470 grams to 3,330 grams. Comparative tests were made on 12 samples, and Table No. 3 shows the variations as found, when different methods of dividing the original samples were used.

A careful study of Table No. 3 reveals the following facts:

1. In general, the greater the percentage amount of any material present in corn, the greater the variation resulting from different methods of sampling.

2. The larger the original sample, the greater the variation in the amount of foreign material and cracked corn present in samples obtained by using different methods of sampling.

"SMUT" IN WHEAT AND "DAMAGED" CORN

There are other grading factors not considered in the above discussions, which are affected by the method of sampling employed in the laboratory. Two such other factors will be mentioned, namely, Smut in wheat and Damaged in corn.

Smut in Wheat vs. Method of Sampling: Smut balls in wheat are frequently counted to determine the number present in 50 grams of sample. The same methods of sampling were used as have been previously described. The original sample weighed 3,000 grams. A true 1,000 gram sample contained 9 smut balls in the 250 grams—or slightly less than 2 smut balls in 50 grams. The first 1,000 grams out of a divider portion consisting of one-half of the original sample, contained 13 smut balls in 250 grams or more than 2 smut balls in 50 grams.

3. The variation in the percentage amount of cracked corn and foreign material present in corn, is not affected to any great extent by the kind of materials present, when different methods of sampling are used.

4. In some samples the variation resulting from different methods of sampling exceeded one-half of the amount of foreign material and cracked corn present in the corresponding true divider sample.

5. The variations ranged from 3.40 per cent deficient to 5.16 per cent in excess, on the basis of the amount present in a true divider sample.

6. Forty-eight samples out of 48 varied one-tenth of 1 per cent or more due to inaccurate methods of sampling in the laboratory. One-tenth of 1 per cent is sufficient to cause a change in grade.

7. Thirteen samples varied 1 per cent or more from the true divider sample.

8. Different methods of sampling changed the grade of one sample from No. 3 to Sample Grade.

GRAIN SORGHUMS

"Foreign material and cracked kernels" is a common grading factor in grain sorghums. This factor is largely a mechanical factor, and was used

9 smut balls in 250 grams respectively, or less than 2 smut balls in 50 grams.

Damaged in Corn vs. Method of Sampling: This factor is usually affected by the method of sampling, in much the same manner as when lighter materials of nearly the same unit size are mixed with a heavier substance. However, when the damaged kernels are of approximately the same unit weight or heavier than the sound kernels, the variations resulting through proper sampling methods will be small. The variations are affected primarily by the relative unit size and weight of the damaged vs. sound kernels, and incidentally by the method of sampling and the size of the original samples. The compensating difference between the lighter damaged kernels vs. the heavier sound kernels, is more than overcome by the relatively greater number of the former in some samples and relatively fewer in others.

SUMMARY

1. Variations occur in samples when different methods of sampling are used in the laboratory.

2. Variations resulting from different methods of sampling in the laboratory, may result in a difference in grade.

3. The kind and character of the grain, also the nature of the material present in the grain, and the amount in which it occurs, may affect the relative percentages of each in samples obtained from the same source by these different methods of sampling.

4. Relative size and shape of individual kernels composing the greater portion of a sample, and the relative specific gravity of both the major and lesser constituents may affect the relative percentages of each in samples obtained from the same source by different methods of sampling.

5. The size of the original sample may affect the relative percentage amounts of grain and of other materials, when the 1,000 grams sample is obtained by any method other than that used to obtain a "true divider sample."

6. Large interspaces between kernels, and relatively fine, heavy foreign material or broken grain, is conducive to large variations in the relative percentage amounts of grain and of other materials present when different methods of sampling are used.

CONCLUSIONS

1. Non-uniformity of grain grading is not due in all cases to the method of sampling of grain in the car.

2. Non-uniformity of grain grading may result when 1,000 gram samples are not obtained by the correct use of a divider in the laboratory.

3. Wide variations in grades may occur when

Table No. 4—Amount of foreign material and cracked kernels in Grain Sorghums, showing the variations resulting from different methods of laboratory sampling.

Sample Mark	Wt. in Grams	True Divider Sample	First 1000 Grams	Rem. of Half Sample	Method A	Method B	Kind of Grain Sorghums
A	3,270	9.70	—3.00	2.30	0.30	1.60	Kafir
B	3,000	5.20	—0.20	2.20	—0.40	1.40	Kafir
C	2,900	6.70	—0.30	1.52	—0.50	0.50	Kafir
D	2,800	7.90	—0.70	2.90	—0.80	2.20	Kafir
E	2,700	3.40	—0.40	0.88	—0.60	0.20	Kafir
F	3,300	8.70	—1.50	1.45	—1.70	1.20	Kafir—Milo
G	3,000	8.50	—1.10	2.52	—1.10	2.40	Kafir—Milo
H	2,900	8.20	—1.40	2.46	—2.20	1.70	Kafir—Milo
I	2,800	8.50	—1.40	1.25	—1.20	1.30	Milo
J	2,700	6.70	—0.90	2.73	0.20	1.50	Milo

in our studies on this class of grain. The results of comparative tests are given in Table No. 4.

Forty samples out of 40 varied one-tenth of 1 per cent or more from the amount present in a true divider sample.

For any given method of sampling in the laboratory, the results from that method were more consistently in one direction than was true in the case of any other grain.

The variations from the true divider sample ranged from 3 per cent deficient to 2.40 per cent in excess.

Twenty-six samples out of 40 varied 1 per cent or more from the true divider sample. (Note: One-tenth of 1 per cent variation may cause a change in grade.)

This sample would have graded Smutty. Samples obtained by Methods A and B contained 8 and

inaccurate methods of sampling are used in the laboratory.

4. Our recommendation for alleviating the distress of the trade resulting from non-uniform grading include:

(a) The determination of the average variation in determining quantitative factors on samples of the minimum sale size, i. e., 250 grams for smut in wheat, and, or damage in corn, and 60 grams for other grains in wheat, etc.

(b) Establishment of a system of "tolerances" or "limits of variation" to be allowed in grading grain. This system to be based on data secured for investigations mentioned in (a), and to be modeled after the rules and tolerances adopted by the Association of Official Seed Analysis of North America.

(c) The use of a divider in securing truly

representative 1,000 gram portions of an average sample.

(d) The reduction of the number of "line" samples by the use of a system of tolerances, and the elimination of an arbitrary line in which personal opinion is so important a factor.

(e) Establishment of a "neutral zone" immediately below several grade limits for each quantitative grading factor, by admitting those samples to the next higher grade which come within the "tolerance."

(f) Providing a definite percentage tolerance basis for inspectors to work on, rather than arbitrarily giving the sample the benefit of a doubt, as is done at present.

(g) Eliminating wholly or in part, slight differences in interpretations of grading factors representing the "human element" or the "personal equation," by providing a definite tolerance.

MICHIGAN DEALERS' NEW PRESIDENT

When the Michigan Hay & Grain Association elected A. L. Riedel of Saginaw to be its president during the coming year, it knew what it was about. Mr. Riedel is a go-getter, and has had a wide ex-



A. L. RIEDEL

perience in handling grain and hay. In fact he practically grew up in an elevator, one owned and operated by his father at Minden.

In 1915 Mr. Riedel became associated with the Michigan Bean Company and was secretary of that company until 1919 when he was made treasurer and manager, the positions he now holds.

Most of the grain companies in Michigan handle beans which have done almost as much to make Michigan famous as its peaches and flivvers. Michigan beans have a quality which cannot be excelled and they bring a premium from discriminating users over other varieties. But be that as it may, Mr. Riedel has shown himself to be a grain and bean expert, is an able executive, and with Tracy Hubbard holding down the secretary's berth, should make up a team that will give the Michigan Association an active and successful year.

RECORDS SHOW HEAVY DOCKAGE LOSS

Of the 1921 Spring Wheat crop, approximately 9,500,000 bushels of foreign material such as weed seeds, other grains, and finely cracked wheat were harvested, threshed, and shipped with the wheat to terminal markets, records of official grain inspectors show.

Inspection statistics for 127,976 carloads received at Minnesota inspection points alone during the crop year ending August 31, 1921, show that 121,485 cars, or 94.9 per cent, contained 1 per cent or more of readily separable foreign material, or dockage; 39,841 cars, or 31 per cent, contained 10 per cent

or more of dockage; 234 cars contained 20 per cent or more; 58 cars contained 30 per cent or more; 26 cars contained 40 per cent or more; and 7 cars contained more than 50 per cent of dockage.

The growing, threshing, handling, and shipping of this large quantity of dockage represents a tremendous agricultural waste in the opinion of the United States Department of Agriculture. The sowing of clean seed wheat, proper cultural methods, and cleaning the threshed grain on the farm before it is hauled to market are recommended as a remedy for this condition. Weed seeds, other grains, and finely cracked wheat, separated from the wheat on the farm and finely ground, makes fairly good feed for livestock and when so used can be substituted for the higher priced feeds such as oats, corn, and commercial mill feeds, says the Department, in a bulletin on the subject.

During the last few seasons, the Department of Agriculture has been making experiments in the field with recleaning devices that will remove the dockage from wheat at threshing time. Two grain recleaners which can be attached and belted to the threshing machine have been developed. The recleaners are of different design and each requires but a negligible amount of power and little attention to operate. In operation, the cleaned grain and the dockage that is removed are delivered from different spouts.

DELAY FOR FUTURES ACT ENFORCEMENT

A temporary stay order preventing enforcement of the Grain Futures Act pending a hearing November 13, was issued in Federal District Court on October 30 by Judge Carpenter.

An attempt was made to have the hearings before the Supreme Court, but as this would entail considerable delay the District Court began taking testimony on October 14, and as a great many witnesses will have to be heard it will be some time before a decision is reached.

The bill of complaint, filed by Henry S. Robbins, counsel for the Board, charges that the law seeks to regulate as interstate commerce, trade that is wholly intrastate; that it interferes with state rights to govern exchanges, and that it seeks to deprive members of their property by admitting representatives of co-operative bodies and permitting them to rebate commissions in violation of rules observed by other members.

Unconstitutionality is further charged on the ground that the law makes violation of its provisions a crime "and constitutes the Secretary of Agriculture, the Secretary of Commerce and the Attorney General a commission with power to deprive offenders of their rights to thereafter pursue a lawful avocation; whereas such criminal laws are, under the constitution, enforceable only in courts" with a jury trial. Soundness of other sections granting wide power of control to the Secretary of Agriculture who has authority to designate what exchanges shall or shall not be contract markets is likewise attacked.

Fear of what may result from the drastic provisions, says the complaint, may bring on "a serious disturbance of the grain markets of the country."

"Many owners of grain," it is stated, "will be deprived of the privilege of insuring themselves against price fluctuations through 'hedging' contracts and irreparable loss to members and others would result."

In attacking the law the exchange also points to the alleged inaccurate statements contained in that section which summarizes the supposed evils of marketing. These statements of alleged evils, it is contended, were disproved at the numerous hearings on the bills.

The suit which resulted in the former law being declared unconstitutional was brought by individual members of the exchange, but Chief Justice Taft declared in the decision that the Board itself should have contested the law. Such a policy is being followed this time, with the approval of the other grain exchanges. After the petition for an injunction had been filed, the Legislative Committee of

the grain exchanges made public its report which covers a two year period of legislative turmoil.

Lack of proper co-operation on the part of the Department of Agriculture in the consideration of national marketing legislation is indicated.

After tracing the course of several proposed grain marketing laws, the Committee outlines evidence placed before the Senate Agriculture Committee which showed the unsoundness of the law.

"As a result of a series of conferences between representatives of the grain trade and the Secretary of Agriculture," says the report, "there was evolved a number of amendments which, in the opinion of the grain trade, would, if adopted, make it possible for the exchanges to function under the act if fairly administered."

"At the close of the hearing it seemed probable that the Senate Committee would adopt practically all of the amendments, but after a conference with representatives of the Department of Agriculture the Committee reported the bill out for passage without incorporating many of the most important suggested amendments."

After the Supreme Court's decision against the law, a new bill "even more objectionable" was introduced, containing declarations on futures trading that were disproved by evidence and attempting to "establish a direct conflict between Federal authority and the rights of the several states in which exchanges are located."

Brief hearings were held and "it was evident from the start that the prime desire of the Agriculture Committee was to report a bill out at as early a date as possible without regard to what effect the proposed legislation might have upon the country's marketing system."

"The Committee went into executive session and, without duly considering testimony, the sponsor of the bill was authorized to re-draft the bill and prepare the accompanying report."

Declaring section three of the bill contains "an arraignment of futures trading unsupported by evidence," the Committee says it was "evident throughout the hearings that the intent of the Department of Agriculture was not that section three should convey an accurate picture of the operations involved in future trading, but should establish a firm foundation for the contention that future trading was affected with a national public interest, that it was at times a burden upon, or an obstruction to, interstate commerce and that consequently Federal regulation was necessary."

The report of the Committee says that when the Secretary of Agriculture was asked to pass on proposed amendments for section three of the law now on the books, he wrote senators as follows:

"As to the substitute proposed for section three, the Supreme Court, in its decision on the Future Trading Act, said that ordinary sales for future delivery which do not oblige interstate shipments are not in and of themselves interstate commerce and therefore come within the regulatory power of Congress only when Congress shall find and declare that such transactions do obstruct or burden interstate commerce. Therefore, section three in the proposed act contains a specific declaration that future trading in grain on the exchanges, as at present conducted, is an obstruction or burden on interstate commerce. This seems to be necessary to meet the requirements of that Court decision."

The Committee's report to the grain exchanges on the two years of activity concludes with the statement that there has developed "an appreciation of the important part which future trading plays in the grain marketing machinery of this country." The report is signed by L. F. Gates, Chicago, J. C. Murray, Chicago, C. W. Lonsdale, Kansas City, F. C. VanDusen and F. B. Wells, Minneapolis, chairman.

We wish to congratulate you on the appearance, illustrations and typographical perfection of your report of the Grain Dealers National Convention at New Orleans. It is certainly a fine piece of press work and your report of the convention appears to be very complete and unusually interesting—P. B. and C. C. Miles, Peoria, Ill.

RESERVE BANK AIDS MARKETING

The Federal Reserve Board has issued a new ruling in regard to the discounting of farmers' notes in order that crops may be marketed more gradually. Co-operative associations which pool grain are put in a different class from those which handle crops on a cash basis. The ruling is in part, as follows:

"Inasmuch as agricultural products should not be dumped upon the market as soon as harvested but should be marketed gradually, the carrying of agricultural products for such periods as are reasonably necessary in order to assist the orderly marketing thereof is a proper step in the process of distribution, and a farmer's note which is drawn, or the proceeds of which are used, to finance the carrying of the farmer's products for such reasonable period is a note which has been issued or drawn for an agricultural purpose within the meaning of Section 13 of the Federal Reserve Act and which may, therefore, be eligible for rediscount by Federal Reserve Banks.

"Money borrowed by a grower to enable him to meet his obligations without selling his crop immediately enables him to 'carry' the crop, and therefore when a grower delivers his crop to a co-operative marketing association which is actually engaged in orderly marketing, and when the grower is obliged to borrow money for ordinary general purposes, such as the payment of obligations previously incurred in growing or harvesting the same crop, a draft drawn by the grower on the association for a part of the market value of the crop may properly be considered to be drawn for an agricultural purpose.

"There is a distinction, however, between carrying agricultural products for such periods as are reasonably necessary to effect orderly marketing and mere speculative withholding from the market, in the hope ultimately of obtaining a higher price.

"The question of whether a doubtful case fall on one side or the other of this line is a question of fact which it is not for the Federal Reserve Board to determine, but which should be determined rather by the local bank.

"The price at which commodities were sold by the growers to the association was not fixed at the time of that sale, but the commodities were pooled according to grades, and after all of a particular pool had been sold the proceeds were distributed pro-rata among the producers who had contributed to that pool. The conclusions stated in the rulings included in this summary, therefore, are not necessarily applicable to the paper of associations which operate on any plan substantially different.

"Where, at the time growers deliver their crops to such an association, the association accepts drafts upon it by the growers, such drafts are eligible for rediscount by Federal Reserve Banks as agricultural paper with maturities up to six months, when discounted by the growers' at their local banks with their own indorsements, provided the proceeds are used by the growers for agricultural purposes.

"A draft drawn by a grower on an association to which he has delivered his crop, accepted by the association, and discounted by the grower at his bank, is not, however, a trade acceptance as a draft or bill of exchange regulations, which define a trade acceptance as 'a draft or bill of exchange drawn by a seller on the purchaser of goods sold and accepted by such purchaser,' because the delivery of a crop to a co-operative marketing association is not the kind of a sale which should be made the basis of trade acceptance.

"A note of a corporation or association engaged in performing services in connection with packing and marketing agricultural products not grown by the corporation association itself, the proceeds of which note are used to pay the current expenses of such corporation or association, such as the payment of wages and the purchase of supplies in connection with its business of packing and marketing agricultural products, should not be classed as agricultural paper eligible for rediscount with a maturity up to six months, but should be classed as commercial paper which may be eligible with a

maturity note in excess of 90 days. While the note of a farmer, the proceeds of which have been used to finance the packing or marketing of his own crop, should be classed as agricultural paper, the same is not true of the note of a corporation or association engaged in performing services in packing and marketing agricultural products grown by others, because that is a commercial rather than an agricultural business, even though such corporation deals exclusively with growers."

"JIM DUNN"

BY HOOZUS

Jim Dunn, who runs the elevator at Sperry Sid-ing, says: "These here young fellers that talk 'bout buyin' grain nowadays gimme a pain. If they had t' do bizness like we usta do it in th' ol' days, when we closed th' deals in th' saloons, they wouldn't cut much of a figger.

"I remember—afore I went in for myself—I was a' buyin' for Old 'Dad' Beeghley, an' there was 40 bushels o' nice Clover seed I wanted t' buy, an' I had t' bid against another feller 10 miles south. Th' seed belonged t' three brothers. They was close dealers, but they liked their beer right smart. They was t' wire th' other feller an' I was t' wire my boss for best price, an' we was t' meet that night at th' saloon an' open th' bids.

"Well, here was th' sitchyashun: when we opened

never fail quickly—it jest dies one o' them there lingerin' deaths.

With so many ups and downs in th' grain bizness, some fellers jest can't keep on th' level.

Some farmers are mighty hard t' deal with; but when ya gotta settle with some o' their wives—then there's hell.

IMPROVED SERVICE ON MISSISSIPPI

The Mississippi-Warrior Service, which operates barges on the Mississippi River, has recently made its report to the War Department, showing that the tonnage carried for the year ending June 30, 1922, was 176 per cent greater than for the pre-ceeding year. The line has 11 tow boats and only 45 barges, and the report states that the delay at ports increased on the average from 12 to 20 per cent. This was on account of the fact that there was no excess of barges which the tow boats could handle while others were being loaded or unloaded.

For these delays Cairo, Ill., is in no way respon-sible, for it had in operation loading facilities which can take care of bulk or sacked grain with the greatest dispatch, and can load a grain barge while the tow boat is getting up steam, although the modern tow boats are not like the old steamer that stopped every time it blew its whistle.

Through the large elevator of the Halliday Ele-

this tonnage 36.7 per cent was northbound and 63.3 per cent southbound, and during the last four months the northbound actually exceeded the south-bound traffic. It is worthy of note, too, that 71 per cent of the northbound tonnage and 48 per cent of southbound went to railroads for completion of their journey. Of course, the great majority of the tonnage from Cairo originates on rail lines and some is destined for further rail journey down the river, but most of it goes to New Orleans for ex-port and is handled at that port without rail assist-ance. Cairo certainly has a future as a great grain transfer point and the Halliday Elevator Company is ready to take care of all the business offered.

MUCH HEAT-DAMAGED WHEAT

Many of the stacks and much of the early threshed wheat on farms in sections of the Hard Winter wheat area contain heat-damaged kernels, a re-cent investigation by the United States Department of Agriculture shows. Heat damage was found to occur more often in header stacks than in bundle stacks, because the bundle grain usually is more mature and drier, unless wet from recent rains, at the time of stacking. Heat damage is most likely to occur in header stacks when the grain is headed too green, or wet from dews or rains, or when there is an abundance of green weeds present at heading time, says the Department. The damage from rains



GRAIN HANDLING FACILITIES FOR RIVER BARGE SERVICE, HALLIDAY ELEVATOR, CAIRO, ILL.

up them bids they was both alike, but th' other feller's place was th' nearest t' haul, so one of th' brothers he says t' me, he says: 'Sorry, Jim, but if your price'd a been a nickel more we'd a' traded.'

"Well, I studied for about a minnit, an' then I says t' them, I says: 'Boys! I figger that there dif-frunce is jest about th' price of a "eighth," an' I reckon we're all pretty dry.'

"They talked a cupla minnits, an' then one o' 'em says: 'Jim, ya've bought somethin'. Bring along th' "eighth".'

"I says t' th' bartender, I says: 'Drive th' bass-wood int' her, Schneider, an' set her up there. We're goin' t' stay with ya awhile.'

LITTLE TIPS FROM JIM DUNN

It's no disgrace t' get weevil in your house, but it's a calamity if ya don't get 'em out.

If your biznes is a' fallin' off, don't hunt up some-buddy t' tell it to. Ya won't have t' if ya get busy an' get it back.

When your elevator needs new sidin', don't keep puttin' it off. Put it on, afore someone does th' same thing t' th' fire marshall.

Some farmers have their price an' sell when it gets there. Th' other kind think they'll sell when it gets there, an' then have another price.

Get a real loadin' spout that'll shoot 'er back in th' end o' th' car. If ya're a'goin' t' be a scoop shoveler ya better sell your elevator.

A bizness that don't take a good trade paper don't

vator Company, 100,000 bushels per eight hours can easily be loaded into barges, and if necessary this amount could be materially increased. Sacks of grain also can be handled with dispatch, al-though, of course, the time consumed is somewhat greater than when the grain runs through the big pipe lines direct to the hold of the barge.

The elevator is high above the average level of the river, but the variation in level is great and has to be provided for. At all times, however, there is enough pitch to let the grain run freely by gravity. At low water an extension is put on the pipe line or sack carrier and the grain feeds direct to the hold.

Already several millions of bushels of grain have been handled through this pipe line, and it marks only the beginning of the movement for grain shippers on the Illinois Central or other lines reaching Cairo have just begun to appreciate the advantages of river carriage and the material sav-ings it effects. Cairo was one of the first river cities to install modern loading equipment, for the city is at the head of all-year transportation and is des-tined to become an important factor in revived water transportation.

That this revival is a reality is borne out by the annual report of the Mississippi-Warrior Serv-ice. This year 655,780 tons of revenue freight were carried as against 237,268 tons last year. Of

following the harvest has been excessive in the Spring wheat belt this year.

Wheat threshed at harvest time or immediately afterwards seldom is cured well enough to keep if stored immediately in the ordinary granaries or ele-vator bins, it was found. Such wheat needs first to be dried and cured sufficiently for safe storage, says the Department. It is also pointed out that grain threshed while damp from recent rains is not in a safe storage condition.

Milling and baking investigations by the De-partment show that heat-damaged wheat is unde-sirable for milling purposes, inasmuch as flour made from it is discolored and has a bad odor, and the bread has a poor color and texture, and a disagree-able taste. For these reasons heat-damaged wheat brings a lower price to the producer or dealer than sound wheat of good milling quality. As a result of its investigations the Department of Agriculture has reached the following conclusions:

"Heat-damaged wheat should be marketed on its merits and then used for feed or such other purpose as it may be fit. Heat-damaged wheat is undesirable for bread making and should not be milled for that purpose. Sometimes an effort is made to cover the loss from heat damage by mixing it with sound wheat, but this is an ill-advised practice and should be discouraged, because it breeds dissatisfaction and frequently causes financial losses."

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We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

Official Paper of the Grain Dealers National Association and of the Illinois Grain Dealers Association

CHICAGO, ILL., NOVEMBER 15, 1922

HEAVIER LOADING

CAR shortage each fall brings out the perennial discussion on heavier loading of cars. The same arguments are indulged in by both sides, the same objections are raised by shippers, and about the same amount of co-operation can be counted upon each season. The car service division of the American Railway Association puts its case as follows:

Light loading of agricultural products, flour in particular, can not be justified during this period under any circumstances. The railroads are today hauling cars loaded with not over 40,000 pounds of flour when that commodity can load in the average box car to from 66,000 to 80,000 pounds and in many cases in excess of that. Flexibility in the unit of trade which will allow the shipper to fill up his car, and the shipper insisting upon that right, represents the greatest need to effect the most efficient use of equipment at this time. It is a significant thing that if the average load per car which prevailed during 1920 and 1921 had been secured in 1922, 132,440 cars less would have been required in the first quarter and 486,206 cars in the second, or an aggregate of 618,644 cars to handle the same relative amount of tonnage. Carrying this saving still further, approximately 120,000,000 empty car miles would have been saved during the first six months of this year and would have increased the available surplus cars by approximately 4,000 per day.

This is all admitted by the grain trade, but contracts of sale cannot always be regulated by the car situation; an amount of grain in excess of a buyer's needs cannot be forced upon him merely because a larger car is available for shipping his purchase. Sampling also is a problem that goes with heavy loading, and which the railroads do not take in account. On the other hand shippers can

point to many instances of delay in handling cars in terminals, and a correction of this by the railroads would fill a considerable part of the shortage.

Every shipper, however, realized that it is no time to argue for argument's sake, nor to stand pat upon his rights just because he can legally do so. As Cleveland said, it is a condition and not a theory that confronts us, and every shipper can be depended upon to make his cars go as far as possible, even risking the inspection uncertainty that goes with full loads. If everyone helps just a little, the aggregate benefit will make itself

THE GRAIN FUTURES ACT

A TEMPORARY stay of the Grain Futures Act until the formal hearing on November 13, left the functioning of the grain exchanges intact. Temporary injunctions were granted by Federal judges to the Chicago Board of Trade, Kansas City Board of Trade, Minneapolis Chamber of Commerce, the Duluth Board of Trade and the St. Louis Merchants' Exchange. In Kansas City the injunction was made operative until the Supreme Court shall have passed upon the constitutionality of the Act, and quite likely similar courses will be following in the other cities. In Chicago the hearing scheduled for November 13 was postponed for a day. The Chicago Board wanted to send the case directly to the Supreme Court, but to save time it was decided to hear the case before the District Court.

The bill of complaint, filed by the attorney of the Chicago Board of Trade, points out many features which challenge the constitutionality of the Act, and upon which the Federal courts will have to decide. To the layman the complaints seem ample, but upon that point only the Supreme Court can decide with finality.

At least the Board of Trade can be congratulated upon coming out on its own responsibility to defend its rights. This will cause far less criticism from friend and foe alike than the procedure under which the former Act was tested. It is the grain exchanges' fight and the exchanges should do the fighting, not leaving it to others. No doubt they will be criticized by the irresponsible press, but they are criticized anyway by these same papers and one more count will not make any difference.

THE WHY OF THE CAR SHORTAGE

A MPLE reason why shippers are suffering for lack of cars was graphically explained in a recent statement issued by the assistant freight traffic manager of the Missouri Pacific Railroad. He explained that the normal interchange of load at Missouri crossings is three to one in favor of eastern traffic, which means that eastern lines must deliver two empty and one loaded car for every three loaded cars they receive. At St. Louis alone this would mean the delivery of 250 empty cars per day, or for the period August 5 to September 30 of 14,000 empty box cars. Instead of 14,000 the receipts of

empties during that period were exactly four, while 19,320 loaded cars have been sent east.

Other roads can show similar effects of this unequal distribution, and until some means is arrived at by which eastern roads can be forced to return empties before the grain shipping situation reaches the acute stage that it almost invariably does, grain will continue to be piled on the ground outside of bulging elevators and the grain trade will be handicapped and severe losses suffered through causes over which it has no control.

Surely some means can be devised for the protection of western shippers, so that they will not be confronted with this annual problem. It is one which should receive the earnest consideration of the Interstate Commerce Commission, not as a palliative measure after the damage has been done, but as a permanent program to be put into effect each year before the grain trade is in distress.

IMPROVED CORN OUTLOOK

THE Government crop report as of November 1, showed a corn crop of 2,896,108,000 bushels, as compared with 2,853,000,000 last month, and 3,080,000,000 last year. B. W. Snow's estimate a few days previous was 2,800,000,000 bushels, and P. S. Goodman 2,765,000,000 from his own report and 2,792,000,000 from his correspondents. This is a material discrepancy and we shall see what we shall see. The carry over from the last crop is 178,687,000 bushels making total available supplies 3,084,000,000, as against 3,386,000,000 bushels last year. About 34,000,000 of the estimated increase is in the South.

While there was no change from last month's estimate for small grains, the average weight per bushel has been determined, and this shows a general improvement over last year. Wheat is 57.7 pounds to the bushel, as against 57 last year, and 57.8 the 10-year average. Oats 32 pounds, compared with 28.3 last year and 32 average. Barley 46.2 pounds, as against 44.4 last year, and 46.1 average for 10 years. On the whole the crop year has been a good one for the farmers.

RASH STATEMENTS

ONE of the Non-partisan League newspapers of North Dakota recently came out with the statement that grain dealers of the state have robbed the farmers of \$33,900,000 this year by extracting too large a margin on wheat. The opposition papers have had a lot of fun out of this for they have pointed out that the state has 114,000,000 bushels of wheat, and after taking out 10,000,000 for seed there is 104,000,000 left, of which perhaps 35 per cent has been marketed. As co-operative elevators handle 75 per cent of the crop, and they can hardly be accused of robbing themselves, other elevators must have robbed the farmers of \$3.72 on each of the 9,100,000 bushels handled.

This is absurd of course and would be funny if it were not fairly indicative of the extravagant falsehoods newspapers will re-

sort to in behalf of a partisan cause. The majority of people see statements of this kind and believe them without taking the trouble to figure out their fallacy, and prejudice and hatred are spread without cause and to the great harm of the commonwealth and the country.

We dare say that almost every dealer who reads this has known instances in his own community of newspapers making similar extravagant statements without a vestige of truth back of them. Such papers should not be supported and should be informed why not. That is the only way to reach them, but it should be done, for the unbridled propagandist press is the greatest menace this country has today.

POLITICS

THE report of the Legislative Committee of the Grain Exchanges on the Grain Futures Act was in the nature of an indictment of the Department of Agriculture and the Senate Agricultural Committee. By inference these two bodies, in a matter of the gravest economic importance, are accused of playing politics of the variety known as "peanut." They evidently considered bidding for the farmers' vote of more importance than the preservation of a marketing institution which had taken years to build to a state of perfection without an equal in the world's history. All of this was implied in the report, although no direct charges of the kind were made.

The present Congress has shown to no greater disadvantage than in its handling of the Grain Futures Act. The only parallel in recent years has been the investigation of the grain trade by the Federal Trade Commission. Both Congress and the Commission apparently made up their minds upon certain points and then directed their efforts, not to ascertaining the truth, but to proving their preconceived notions. This, of course, is always to be expected when legislative bodies get to monkeying with the buzz saw of business. The body politic gets hurt, and incidentally business is put out of kilter.) We can be thankful that, in spite of Senator La Follette, we still have a Supreme Court.

DOCKAGE WASTE

AFTER a long series of experiments the Department of Agriculture has succeeded in attaching to threshing machines grain cleaners of two different designs, which will separate weed seeds and broken grain from wheat and deliver the cleaned grain through a separate spout. The Department has been making a strenuous effort to get farmers interested in these machines so they can keep the dockage out of the grain and use it on the farm, the only place it has economic value. But this educational process makes slow headway.

Last year Spring wheat farmers paid freight on 9,500,000 bushels of foreign material in their wheat shipments. This cost them about \$1,000,000 and they lost the ma-

terial in addition. At home, finely ground, it would have made good feed, or could be used for fuel.

But farmers want volume, and you can't blame them as about half the elevator operators buy wheat on the weight test alone. Of course, the farmer thinks that the elevator man pays the excess freight and he is getting more for his wheat than it is worth. He forgets that the elevator operator figures his dockage losses in his cost of operation and that he pays a price which he thinks will take care of that cost. If all wheat came to the elevator clean, he could afford to pay and would pay more for it. Sometimes for a little while someone manages to get something for nothing, but in the long run we get only what is coming to us for value received, and the farmer is no exception.

ERRORS IN SAMPLING

IMPROVEMENT in inspection methods can only be brought about by a careful analysis of each step in the process. Such work is highly technical, of course, and the average grain man is only academically interested in these studies. But he is directly concerned with results, as unvarying inspection methods that can be applied by all inspectors is important to every dealer.

The article "Sources in Error in Sampling," prepared by W. L. Frank, chief inspector and weighmaster, and R. L. Campbell, assistant inspector of the Sherman (Texas) Grain & Cotton Exchange, appearing on another page of this issue, is one of the most important contributions of its kind that has been made for some time. The authors prepared the manuscript at considerable sacrifice of time and money, and give the results of their efforts to the trade in the hope that greater uniformity in inspection may result. It is only by such unselfish devotion to the ideals of the craft that progress in the grain trade has been made in the past and will be made in future.

NO EMBARGOES

OUR American Farm Bureau Federation and groups of western shippers recently petitioned the Interstate Commerce Commission to embargo Canadian grain moving through Buffalo, under the assumption that such grain helped to block the port and made it impossible for western American grain to move promptly through that channel. Of course the Commission was understood to be powerless to close American instrumentalities to Canadian grain, as such, but it could accomplish the same end by saying that embargoes should be placed upon grain that otherwise would move through designated points, the points being those on the boundary line between the two countries.

The Commission has wisely denied the request, without giving any reason or making public the arguments which led to its decision. That it was wise to deny the embargo request is apparent for two reasons: American grain in enormous volume has

passed through Canadian channels for export, and Dominion shippers are as strongly exercised over this outside congestion of their facilities as we are over the Buffalo situation. When the balance is struck we will probably find as much American grain going to export through Montreal as there is Canadian grain passing through our ports.

The second objection, which the Commission doubtless considered, was the likelihood of retaliatory measures being taken in Canada. An embargo of newsprint paper, for instance, would prove disastrous, and this is only one of many things that could be used. To any unprejudiced observer it appears that the less American and Canadian mutual avenues of trade are hampered the better it will be in the long run for both countries.

GEN. DAWES AGAIN SAYS SOMETHING

WHEN President Harding appointed General Dawes to be the first director of the budget, he earned the gratitude of the country, but got himself into a peck of trouble. General Dawes is a business man and not a politician. He tried to put business methods in Government business and found it to be the hardest row he ever set out to hoe. Incidentally he learned a lot about politics and politicians, and now that he is out of office he takes every opportunity of telling the country what he learned. That is where President Harding's trouble starts.

In a recent public address in Chicago, General Dawes put the issue. He said:

A fight now is reaching its climax, to defeat the budget system. It is being waged by "peewit politicians," among whom cabinet officers are the chief. And the public must know that, against these officers, this is the President's fight. The director of the budget, under the precedent I laid down, obtains from each Federal Department an estimate of its prospective receipts. Then he gets an estimate of expenditures from each Department; then the two statements are balanced and each Secretary is allotted his percentage of the prospective deficiency. He is told that he must reduce his expenditures by that amount or else come in to the President and show why he can't do it.

That puts the burden fairly upon the Secretaries. The trouble is that the Secretaries will not accept that responsibility. They will not do it because they are in Washington, trying to get fame—that they don't get. They will not bear the responsibility—and they can't. Because they don't know anything. They don't know anything from the standpoint of running a great business organization. They don't know how to subordinate themselves to the position of administrative vice-presidents of the routine business of government under the President, who is properly the head of that business. And because they don't know, they become, not servants of the President, but advocates of their bureau chiefs.

This is a severe indictment of officials of the Government, but General Dawes will be corroborated by everyone who has had anything to do with fiscal matters at Washington, except the politicians. If it is President Harding's fight, as General Dawes says, the grain trade to a man, regardless of politics, will be with the President to a finish. Let's get more business in government and less government in business.

EDITORIAL MENTION

The coal crisis seem to be past for this season. We can now get ready for another crisis next year.

Now that the election is over, perhaps even the politicians will be able to see that someone besides the farmers lost money during the slump of 1920 and '21.

The road building program for this country includes plans for 180,000 miles of hard surfaced roads. When these roads are completed we will probably be using airships and won't need them.

October will be remembered in grain circles chiefly on account of the acute car situation, and for the beginning of the fight against the Grain Futures Act. The latter may make the month historic.

President Cunningham of the U. S. Grain Growers, announces that they are not ready to market grain. He might have added that they never will be. All they are ready for is the undertaker and chief mourners.

Again there is talk in the Northwest of farmers uniting to hold their wheat off the market until the price goes to \$1.50. The farm leaders seem to have learned nothing from their experience of two years ago.

Montana is planning to adopt one or more wheat grades above the Federal No. 1. This will not affect interstate shipments, but will be applied in local purchases and storage. The state is also to have soon a gluten determining laboratory for wheat as they have in Kansas.

Blocked elevators in the Northwest are given preference in the distribution of grain cars. This is not fair, perhaps, as between elevators, but farmers have to be considered too, and the distinction is made so that they can get their grain under cover even if they can't ship it.

The Non-partisan League of North Dakota now has two representatives in the U. S. Senate. Senator-elect Frazier made such a mess of his governorship that he was recalled by a large majority, but they sent him to Washington where he can play with socialist theories and North Dakota will not have to foot the bills as when he was governor.

In its news letter of November 10, the Mutual Fire Prevention Bureau made the announcement, "No losses to report for the past week." This is rather remarkable for our news columns contain reports of 50 fires in elevator plants during the past month. The summer and fall have shown unusually heavy losses from fires and it is to be hoped that the Bureau's report marks the beginning of better times. The Grain Dealers National Fire Insurance Company, sends a warning based on these many fires over recent months.

"Look to your fire protection," it says. "Clean out your cob and dust houses. See that the ground is skinned for a safe distance around the elevator. And this above all: Keep your eyes and ears open."

On February 17 of next year there is to be held an exhibition of patents at the Grand Central Palace in New York. If they exhibit all the patented grain doors the show will have to be extended from the Battery to the Bronx.

Fiscal affairs in Europe appear dark, but it may be the clearing cloud. The Stinnes plan of paying the indemnity in kind is the only practical plan which has been suggested and as he has actually begun the rehabilitation of devastated France under this plan, the silver lining of the cloud has already begun to show.

Every fall the court dockets have a certain number of cases against farmers who agree to deliver grain and then repudiate their verbal agreement. Play safe; do not commit farmers' grain unless you have a cast-iron written contract for delivery. A verbal contract on a rising market is not worth the breath it took to make it.

During the past two years the Government has advanced \$3,500,000 to farmers for seed. Very few of the loans of last year were collected because of short crops. This year all collections are to be made. Make sure that the Government does not hold a lien on the grain you buy, for these liens are a first claim on the 1922 crop.

Everything is set for the International Grain & Hay Show which opens on December 2, at the Stockyards in Chicago. New champions will doubtless appear, but the old standbys can be depended upon to show the kind of grain that has put America in the van of all grain producing countries. Reduced rates are given by all railroads for the show and it is worth a visit by every grain dealer as well as producer.

The new Prime Minister of England, Andrew Bonar Law, advocates "as little interference as possible with initiative for individuals, leaving recovery to come, not so much by action from above by Government as by the free play and energy of our own people." We seem to recall a similar plank in the platform of the present administration in this country, but it gave way under the tread of the blocs. Let us hope it will serve to better purpose in England.

Montana requires all elevators receiving grain for storage to give bonds. If a \$10,000 bond is given a monthly report must be made to the Division of Grain Standards and Marketing. For a \$5,000 bond weekly reports must be made and the house that only gives a \$2,000 bond must make a daily report. These bonds are required on the assumption that elevator owners are likely to steal the grain, and to afford protection to the owners of the grain, but the law is not

equitable. If a man can steal \$2,000 worth of grain in one day certainly he could do better than \$10,000 worth in 30 days. Doesn't it make you laugh when a politician accuses a business man of not being honest?

Japan has fixed an import duty on rice of approximately 23 cents per bushel. Duties on wheat and flour have been materially increased. Tariff walls bid fair to force every country to become self-supporting or go out of business. Incidentally they are sowing seeds for future wars, and the seeds have a high percentage of germination.

With five large markets voluntarily using the proposed Federal hay grades, that trade will have an opportunity for practical demonstration before the grades are officially adopted. This trial will reveal any weaknesses in the proposed grades and will eliminate the necessity for tinkering after adoption. There are always men who are skeptical of anything new. It is chiefly to satisfy these men that the experiments in practical operation are being made.

As we go to press, on November 14, the second annual conference for the Prevention of Grain Rust is being held in Minneapolis. A great deal of experimental work has been done in the past year and doubtless many helpful suggestions will be offered. Rust is the cause of serious losses to wheat growers each year and if measures can be discovered that will prove really preventive, millions of dollars will be saved to growers and, incidentally, grain dealers will have substantially larger amounts to handle. The conference should have the support of every grain dealer.

The threat of chinch bug damage is greater this year than for a long time. W. P. Flint, state entomologist at the University of Illinois, recently announced that the threat is as great as in 1887 when chinch bugs caused nearly \$100,000,000 damage to crops. The warning to "Fight the Chinch Bug Now," which appears on another page and which was prepared by the Southwestern Wheat Improvement Association, is particularly timely, and it would be a good plan to show it to your farmer friends who grow Winter wheat.

Judge K. M. Landis has been suggested by an economist for the Federal Trade Commission as the high commissioner to see that grain markets are not manipulated. Judge Landis would be a great disappointment to the Commission, for it would take him about two hours of investigation to find out that the grain markets operate according to economic law and the less that law is interfered with the better for all concerned. Judge Landis has a fund of common sense and he is not in politics, so his conclusions would be a sad blow to the Federal Trade Commission which has spent many months in attempting to prove that all terminal grain dealers are crooks, and that grain prices are things that can be juggled at will by individuals.

S. M. RATCLIFFE
Buffalo

NEWS OF THE TERMINAL MARKETS

R. S. FITZGERALD
Cincinnati

WANT CARS FOR NORTHWESTERN GRAIN

The Milwaukee Chamber of Commerce recently mailed 3,000 letters to country shippers of Wisconsin, Iowa, Minnesota and South Dakota soliciting their aid in a movement for an embargo on Canadian wheat and thus release railroad facilities for the exclusive use of the growers of United States grain. An appeal was also made to the Interstate Commerce Commission and it was pointed out that scarcity of cars was hindering the movement of northwestern grain while Canadian grain was rushed through for export.

ANYWAY IT'S GONE

Primary receipts of wheat have been heavy, and export clearances have been small, yet there have been no accumulations of importance, and the disappearance of the wheat has puzzled many. A few are of the opinion that liberal stocks of wheat will turn up later in some unexpected position, but others express the belief that an increased domestic milling demand, together with the probable piling up of milling stocks, may account for the disappearance.—*Hulburd, Warren & Chandler, Chicago, Ill. From late November letter.*

CARS BADLY NEEDED

There are no features in our market which are not prevalent in most of the markets. Business is greatly restricted on account of the car shortage which seems to be becoming more stringent daily instead of better, and we all feel that we could do a great volume of business if cars were available, which we hope will be soon.

The demand for grain of all kinds is very good. Prices seem to be high enough to induce farmers to sell some of their surplus, at least these are the facts as reported to us from the country.—*E. P. Bacon Company, Milwaukee, Wis. Market letter of Minneapolis, Minn. From late November letter.*

CORN IN STRONG POSITION

Corn now holds the strongest position it has had since the World War inflation. It is becoming daily more evident that there will be no material marketable surplus of corn. Corn statistics show heavy decreases in the new crop and farm reserves, and a remarkable increase in the domestic and foreign demand and in hog production.

Undoubtedly the markets will be subject to periodic sinking spells, but to repeat our observations of the past two months, fundamental conditions, as we see it, are favorable to price enhancement in all grains.—*Quinn-Shepherdson Company, Minneapolis, Minn. From late November letter.*

FEDERAL GRADES FOR GRAIN SORGHUMS

In response to a demand from the trade, Federal grades for grain sorghums were formulated by the Department of Agriculture in 1921 and are now in use in all the principal grain sorghum markets.

Under the grades, the grain sorghums are separated into nine commercial classes: Kaffir, milo, durra, feterita, darso, Freed sorgo, Brown Kaoliang, Schrock Kaffir and Shallu. Grain sorghum of one class that has more than 10 per cent of another mixed with it is classed "Mixed Grain Sorghum." Three classes, Kaffir, Milo and Durra, are divided into two sub-classes on the basis of color of kernels. Sub-classes are recognized because these classes contain both white and colored kernels. White kernels are preferred for some uses and colored kernels for others. Each class or sub-class is divided into four numerical grades (1, 2, 3 and 4), dependent upon condition and general appearance,

test weight per bushel moisture content, percentage of damaged kernels, other grains, and foreign material and cracked kernels. Grain sorghum failing to meet the specifications for any one of the four numerical grades is graded "Sample Grade."

A more detailed explanation of the Sorghum grades, with a complete tabular summary, will be found on page 334 of this issue.

DEATH OF EDWARD H. CULVER

The loss of Ed. Culver, chief grain inspector of the Toledo market, means much to Toledo and to the general grain trade. His loyalty to that market, his executive ability as chief inspector and his intimate knowledge of conditions in the Middle West make his place difficult to fill. The title of "Big Chief," by which he was familiarly known, shows the warmth of sentiment in which he was universally held. Added to this was the deep respect which was accorded him everywhere for his hon-



THE LATE EDWARD H. CULVER

esty and sincerity as an inspector. This was unquestioned for 40 years and gave him a respectful attention at his home or other markets and on the platform of state and national conventions, of which before his recent illness he was a regular attendant and took an active part. He passed away October 26 at his home, No. 417 Islington street, in his sixty-first year, after a two years' illness. It was only the last two months of his illness that he was confined to his bed.

Mr. Culver was a native of Toledo, where he was born in 1860. That city was his home with the exception of a few years during his early boyhood spent on a James River plantation near Richmond, Va., and on an Ohio River farm near Marietta, Ohio. He began his business career at 13 as an errand boy for Falles & Lynton, flour millers, with whom he remained until 1876.

He then sold for two years until the fall of 1879, when he was appointed a helper on the grain inspection force of Toledo, and worked as such and as a practical inspector until 1886, when he took a position with Southworth, Paddock & Co. About a year later he was made official grain sampler for the Toledo market and held this position until October 17, 1892, when he was appointed chief

grain inspector, a position which he held uninterruptedly until his death.

Mr. Culver lost his wife by death six years ago. Since that time his home has been kept by his daughter, Stella Culver. He is also survived by two daughters, Mrs. Louis Heron and Mrs. Mills Coady, and three sons, George Culver, who is employed in the Toledo Grain Inspection Department; Frank Culver, captain of Syracuse University football team this year, and Edward B. Culver.

Mr. Culver was a member of the Masonic order, the Odd Fellows, and a member of the old Toledo Cadets.

GOOD DEMAND FOR OLD AND NEW CORN

Wheat has been holding its own and is in good demand, especially for the Soft variety. No. 2 Red is quoted nominally at \$1.20 f.o.b. 41½ rate points to New York. The movement is light.

Corn is showing unusual strength in the face of the new crop movement and there is a good demand for all kinds, but especially on strictly old, and low moisture new corn. This market is averaging about 60 cars of corn daily. Could take care of a larger movement nicely. Local interests advise car situation bad, but advices from the country show improvement and we look for a larger movement soon.

Not much to say about oats except that the demand is ample for the supply and at good prices.—*McCardle-Black Company, Indianapolis, Ind. Market letter of late date.*

THE CINCINNATI MARKET

The cash grain situation in Cincinnati has been very peculiar, probably due to the fact that it is dependent entirely upon the car situation at this time.

Prices have been very independent of the situation and have varied strictly with the receipts.

A day with fairly heavy receipts will see prices lower and demand rather dull. The very next day, the entire situation may change, with lighter receipts, and a very keen demand will spring up and prices will go higher.

The first cars of corn arriving sold at a large premium but it is now selling on drying basis and most of the first premiums have been lost.

The hay market is very strong, simply because the receipts are entirely inadequate to supply the demand.—*Mutual Commission Company, Cincinnati, Ohio. Market letter of November 10.*

CAR SCARCITY CAUSES LIGHT RECEIPTS

The present week was a short one insofar as grain trading days were concerned, as our exchange was closed on Tuesday the 7th on account of Election Day, and also November 11, Armistice Day, leaving only four days of the week on which grain consignments were offered on the exchange floor.

Receipts during the week were light, due undoubtedly to the scarcity of empty cars for grain loading at country stations for consignment to the terminal markets. Everything that did come in was readily disposed of at the prevailing prices. For the week rye gained about 1½ cents per bushel, corn from ½ @ 1 cent, oats unchanged to a shade lower, and barley unchanged for the better qualities while the lower grades and especially barley mixed with black and wild oats sold lower losing perhaps from 1 to 2 cents per bushel. In wheat the Soft advanced about 1 cent, while the Northern Spring remains about unchanged to 1 cent lower than former price.

We hear from various sources that many country elevators are filled, and are waiting for suitable

empty cars in which to ship their grain to terminal markets. The buyers here operating elevators advise that there is a good inquiry but are experiencing great difficulty in securing the proper empties for shipment into eastern territory. The railroads have laid down numerous rules regarding the loading and routing of the various railroad companies cars, and it is hoped that in doing this some improvement in the distribution of cars for grain loading will be accomplished.—*Milwaukee Grain Commission Company, Milwaukee, Wis.*

WHEAT MARKET FIRM

The wheat market here has been very firm, owing to the extreme light receipts, caused by the scarcity of cars, and the premium for immediate delivery has been well maintained.

At the close of the week, wheat was as high as it has been on the crops, with No. 2 Red quoted at \$1.20 to \$1.30.

Early in the week the corn market was very firm, and prices held up well for old corn, but the last few days of the week has shown more liberal receipts of new corn which has influenced the market, and the decline has followed.

Mild weather has had its effect on the demand for hay, especially for lower graded. Choice hay, both Timothy and light mixed, are not arriving in quantities to supply the requirements of the trade. Prices have advanced \$2 per ton on hay of top quality.—*The McQuillan Company, Inc., Cincinnati, Ohio. Market letter for week ending November 13.*

GOOD DEMAND FOR WHEAT—OLD CORN MOVEMENT LIGHT

For some time, we have had a most excellent demand here for wheat, with Soft Red Winter variety selling at very fancy prices, with both Mixed and Hard wheat also doing well.

Strictly old corn movement is quite light with fancy prices prevailing and any shippers loading strictly old corn should so advise their consignee, as some of our buyers are interested only in corn which they know to be of the old crop.

Have had a fairly good movement of new corn for so early in the season and the better grades of White and Yellow are selling well, with Mixed rather than dull, and it is our opinion that unless we have much colder weather the lower grades showing high moisture content, will be going at wider discounts. The oats movement only fair with plenty of buyers at full prices.

As we see nothing to indicate much improvement in the cash situation, looks like markets will not be over burdened at any time with heavy receipts and which will no doubt result in a healthier market condition, as we will perhaps have just a fairly steady run and which business is much more satisfactory to handle and generally more profitable to the shippers.—*Bert A. Boyd Grain Company, Indianapolis, Ind. Market letter of November 13.*

NEW CORN RECEIPTS INCREASING

Receipts of wheat in the St. Louis market continue fairly liberal, but are not showing the quality in grades as compared with receipts 30 days ago. An excellent demand continues for the best milling grades, mainly for Soft Red wheat on milling orders, and while there is no evidence of big buying from any particular district, the demand is broad, and offerings of the best milling grades are selling at the highest premiums on the crop. Ordinary quality, particularly Soft wheat of light test weights, are slow sellers except at discounts ranging from 3 to 5 cents; Hard wheats are also in good demand from both mills and export interests, although the demand has not been so keen the past two or three days.

The empty car situation remains unchanged, with advices indicating considerable complaint from country points on account of the poor condition of the equipment furnished for grain loading and a scarcity of cars on certain divisions.

Receipts of new corn are showing a gradual increase, and there have also been moderate offerings of old corn included in the daily receipts. The new corn is showing good quality, with a comparatively

low moisture and damage content. There has been an excellent demand for both new and old corn up until this week, but the general anticipation of heavier receipts with more liberal offerings from country points has resulted in a slackening off of the buying power, and prices have shown a fair decline during the past week. It is quite likely that the empty car situation will be the big problem in the corn market for the next 30 days.

Oats receipts continues fairly liberal, showing, largely, good quality, and have met with an excellent demand. There has been an excellent feed inquiry, as well as evidence of good accumulative buying.—*Marshall Hall Grain Company, St. Louis, Mo. Market letter for week ending November 13.*

CINCINNATI EXCHANGE MOVES

The Cincinnati Grain & Hay Exchange has taken up new quarters in the United Bank Building, Third and Walnut streets, having leased 3,600 square feet of floor space for two years, with privilege of renewal for three more years. This is in the nature of a temporary arrangement while the Chamber of Commerce with which the Exchange is affiliated is occupying its temporary quarters in the Herchode Building, where the facilities offered the grain and hay men were inadequate.

Secretary Schuh states that the Exchange has not by this move severed its affiliation with the Cincinnati Chamber of Commerce, nor is there any



NEW HOME OF CINCINNATI HAY & GRAIN EXCHANGE

ill feeling between the two organizations. In fact, the Directors of the Exchange have continued the special committee to negotiate with the Chamber for quarters in its proposed building, when it finally decides to build.

The new quarters in the United Bank Building are on the ground floor, with the main entrance on Third street, and the inspection and weighing departments are also accommodated under the same roof.

WHEAT AND COARSE GRAINS AT ST. LOUIS

The cash wheat market acts tired—premiums are so great that millers are beginning to back off from them and it looks as though we will have some little decline in the cash market even if the future market remains strong. Receipts are a little above normal and it looks as though they will continue to be fair now that the car situation has loosened up a little. The wheat situation west of the Mississippi River is rather dull—the wheat there is about all moved out and local mills are taking care of the receipts. There is considerable wheat back to move that is piled up in the elevators in Illinois, but with this car situation loosening up as it is now it will work out, we think, in the next couple of weeks.

New corn is beginning to move and it is of a little better quality especially in Illinois, than it was last year. Corn is unusually dry and some few cars of it coming in here grading No. 2, although the majority of the new corn coming in is grading No.

3. The market for the moment acts a little heavy for cash corn, although the future is holding up fairly well. Any material increase in the corn is going to result in sharply lower prices.

Oats are acting well and the demand seems to take care of the supply at all times. There is no accumulation of stocks here or anywhere outside of some of the lake ports. We think these oats will continue to sell at fair prices all through the season.—*Elmore-Schultz Grain Company, St. Louis, Mo. Market letter for week ending November 13.*

ANTICIPATE PROSPEROUS 1923

Grain values continue strong in this market due to the large consumptive demand in the southern and southwestern territories, and the moderate receipts are being absorbed at prices which are very satisfactory to shippers who are sending their grain this way.

Practically all of the 1922 crop of wheat has been shipped out of the territory tributary to this market. Stocks in local elevators are very light.

An excellent demand prevails for corn, both for domestic and export shipment. The corn crop in the territory south of the Ohio River is a minus quantity this year.

Oats are moving in fair volume, and the prospects are favorable for an increased demand as the season advances. Cotton and other southern staples are bringing good prices and extensive acreage will be planted next year so that we are looking forward to a prosperous 1923.—*Samuel Hastings Company, Cairo, Ill. Market letter of November 11.*

THE SITUATION AT PITTSBURGH

Receipts of corn are gradually increasing and the past day or two country offerings are much more liberal both on old and new corn. Some new corn arriving here and about half of the receipts show up as good quality and the remaining one-half being rather high in moisture.

Spot cars of desirable corn bringing 1½ to 2 cents per bushel over western terminal market prices. The demand, however, is not as keen as it was several weeks past.

The receipts of oats are sufficient for the demand which is somewhat lighter than it has been for the past 30 days. Offerings of loaded cars are now very numerous and the situation apparently is much easier. Western terminal markets are offering loaded cars through this territory without the premium that has been prevailing for several weeks. Country offerings on the increase but not burdensome.—*Harper Grain Company, Pittsburgh, Pa. Market letter of November 13.*

GRAIN FUTURES LAW NOT YET OPERATIVE

The preparations for the enforcement of the Grain Futures Law on its effective date November 1, were made inoperative by the action of the Chicago Board of Trade in filing its petition in the Federal District Court at Chicago for an injunction restraining the Government from enforcing the law. Three grain exchanges received designations under the new law as contract markets. These markets were Los Angeles, Milwaukee and San Francisco. An order was granted temporarily restraining the Government from enforcing the law on five of the principal exchanges applying for an injunction. The Toledo exchange announced its intention to discontinue grain futures trading pending decision of the constitutionality of the law. Hearing on action brought at Kansas City was held November 8 and that brought by the Chicago Board of Trade on November 13. The law will not be operative in these markets pending decisions.

LOOK FOR GOOD BUSINESS

Our spot market on corn and oats has ruled very steady during the past few weeks. The price changes have been within a very narrow range. Rail receipts have increased moderately but the demand has been sufficient to absorb everything which has come on the market. The car congestion east of Buffalo continues with the result that local elevators are filled with grain and several million bushels afloat in vessels in the harbor awaiting their turn to

unload. This congestion is resulting in a heavy curtailment of the amount of grain which should be moved to this port by lake before the close of navigation which are putting added strain on the railroads to handle this business by rail during the winter months.

The feeding demand in the eastern territory is very good and promises to increase heavily with colder weather and it is believed that a larger amount of grain and feeding stuffs will be consumed east of Buffalo this winter than has been the case for several years past and the trade in this vicinity in general are very optimistic over the outlook for a good business throughout the entire winter.—*J. G. McKillen Inc., Buffalo, N. Y. Market letter of November 13.*

GOOD DEMAND FOR CORN

Receipts of corn here recently have been only fair and values have been holding well in line with other markets. There has been a good demand for this cereal from southern markets for export purposes, but the domestic demand East has not been urgent.

There is very little improvement in the railroad situation, cars still being very scarce, and the country are not disposed to sell much grain on this account. No doubt, if country stations were furnished with more cars, receipts would increase materially, but there are no signs of an improvement in the situation in the near future.

Receipts have been light and this cereal has been bringing good prices here. The bulk of the arrivals have been going to outside oatmeal mills, who seem to be very anxious buyers. The same conditions exist in this cereal as in corn, as regards the car situation.—*Mueller Grain Company, Peoria, Ill. Market letter of November 13.*

CHANGES IN MEMBERSHIP

Chicago.—New members recently admitted to the Board of Trade are: Thomas E. Cavanagh, John V. Beggs, Ferdinand Frazier Jelke, David M. Minton, Harold O. Hunt, Martin B. Jones, Harry J. Barry, Edward Stuart Galloway, Robert B. McClean, Arthur L. Gustafson, Philip A. Crane and Lawrence J. Nelson. The memberships of the following have been transferred: Albin P. Gaylord, C. E. Kinsman, W. A. Walters, H. K. Copenhaver, R. N. Gardner, Estate of F. S. Cowgill, E. A. Tietgens, George P. Lamy, D. W. Emmett, Estate of Harry Boore, Harold D. McCord and Ned McDonald Freeman. Harvey L. Boyer was expelled from the Board. Reported by Secretary John R. Mauff.

Cincinnati.—The following were recently granted memberships on the Grain & Hay Exchange: Nieman & Nieman, H. N. Atwood & Co., C. A. Russell, C. J. Dils, C. W. Popp and the Perin-Brouse-Skidmore Grain & Milling Company. Thomas M. Dugan & Co. and Van Leunen & Co., have resigned from membership. Reported by Secretary D. J. Schuh.

Duluth.—Memberships on the Board of Trade have been granted to R. B. Loring, A. R. Walker, W. H. Gooch, H. D. Wells, M. A. Sauter, F. T. Hurley and J. R. McMillan. D. T. Helm, Garfield Meyer, George W. Porter, F. J. Smith, M. R. Devaney and E. N. Osborne have withdrawn their memberships on the Board. Reported by Secretary Charles F. MacDonald.

Milwaukee.—W. Osborn Goodrich, Jr., was recently admitted to membership in the Chamber of Commerce; the membership of F. P. Goodrich was transferred. Reported by Secretary H. A. Plumb.

GRAIN MOVEMENT THROUGH BALTIMORE INCREASES

According to figures compiled by the office of the Secretary of the Baltimore Chamber of Commerce, the movement of the various grains, as well as of flour, showed a considerable increase in October, as compared with the same month a year ago, with corn again showing the greatest gain in exports. Total receipts of all grains amounted to 5,147,000 bushels in October, as against 2,567,000 bushels arrived in October, 1921, while total exports for the past month were 4,260,000 bushels, compared with 2,184,000 bushels shipped in October last year.

Only on three former occasions, in the years 1898,

1899 and 1900, were the exports of corn from the port of Baltimore larger than they have been thus far in the present year, and should the same ratio of corn shipments from Baltimore continue during the next two months, the total 1922 exports will exceed those of the year 1900, when they aggregated 40,535,000 bushels. In 1899 Baltimore exported 46,786,127 bushels and in 1898, 45,096,477 bushels of corn. So far this year the corn shipments have been 38,156,798 bushels.

Following is a comparison of the receipts and exports of the different kinds of grain, as well as of flour, from Baltimore during October, 1922, and 1921:—

	Receipts		Exports	
	1922	1921	1922	1921
Flour, bbls...	151,620	142,387	81,408	49,066
Wheat, bu....	1,093,377	1,320,394	1,739,457	1,658,187
Corn, bu....	1,870,518	508,845	965,304	77,142
Oats, bu....	492,152	52,727	245,000	.....
Rye, bu....	1,409,395	605,282	1,120,130	406,737
Barley, bu....	154,314	79,281	149,764	41,151
Malt, bu....	125,458	.....	39,551	.....
From January 1st to October 31st.				
	1922	1921	1922	1921
Flour, bbls...	1,173,229	1,363,455	385,730	584,225
Wheat, bu....	18,326,854	21,116,393	17,866,286	18,600,154
Corn, bu....	39,720,373	17,935,189	38,156,798	16,662,351
Oats, bu....	4,466,521	1,584,394	2,799,043	517,090
Rye, bu....	14,593,100	11,286,509	15,892,510	10,390,782
Barley, bu....	864,810	1,212,736	1,012,973	1,451,779
Malt, bu....	347,749	28,611	288,793	.....

TERMINAL NOTES

A membership on the Chicago Board of Trade sold on November 10 at \$5,400 net to the buyer.

M. J. Pritchard, formerly in the grain business at Minneapolis, Minn., has become associated with F. J. Seidl Company.

Harvey L. Boyer was recently expelled from membership in the Chicago Board of Trade for trading while insolvent.

George F. Powell, president of the St. Louis Merchants' Exchange, St. Louis, Mo., has been elected a director for two years of the Chamber of Commerce.

Charles S. Moffitt, for many years engaged in the grain business at St. Louis, Mo., with his brother Nat L. Moffitt will make his future home in California.

James Richardson & Sons, Ltd., of Kingston have opened a branch office in Edmonton, Alta, under the supervision of W. V. McLean.

F. W. Donaldson & Co. has been formed at Chicago, Ill., to engage in the grain commission business. Mr. Donaldson was a former member of E. W. Wagner & Co.

Owing to the death of W. P. Foote of Champaign, Ill., the grain mill and feed business at that point will be continued through the office of H. I. Baldwin & Co. also of Decatur.

Dudley M. Irwin, grain merchant and barley specialist of Buffalo, N. Y., filed a voluntary petition in bankruptcy on October 31. Assets were given at \$288,934 and liabilities \$497,779.

J. J. Bagley has been appointed general manager for Logan & Bryan, Chicago, succeeding F. C. Hollinger, who becomes a partner in the firm of Logan & Bryan on the Pacific Coast.

The Kasco Mills, Inc., wholesalers of grain and manufacturers of feeds at Waverly, N. Y., have opened an office at 605 Chamber of Commerce, Boston, Mass., with Frank C. Bowes in charge.

David L. Croysdale has sold his interest in the Croysdale Grain Company at Kansas City, Mo., to Charles F. McCord and David Logan. The firm name will be changed to the McCord-Logan Grain Company.

The Corn Exchange Grain Company succeeded the Corn Belt Grain Company at Mattoon, Ill., on October 24. The firm does a general brokerage business in grain, flour and feed. R. G. Ernst is manager of the company.

The following were recently elected directors of the Omaha Grain Exchange: C. C. Crowell of the Crowell Elevator Company; S. S. Carlisle of Carlisle-Burns Grain Company; C. D. Sturtevant of the Trans-Mississippi Grain Company. C. H. Wright, president of the Exchange for two years, and E. E.

Huntley of the J. Rosenbaum Grain Company retired from the Board of Directors. The Board will meet and elect new officers about the middle of November.

The first new White corn of the season at Baltimore, Md., arrived early in November from Virginia and was ensigned to Aaron Lewis Son. It sold for 70 cents per bushel and was of good quality with average moisture content.

The creditors of W. A. Frazer & Co. of Chicago, Ill., who failed some 20 years ago, received their final dividend October 27. It was for 3 per cent. The affairs of the company have been in the bankruptcy court since the failure.

Frank Kramer, formerly of the Kramer Grain Company of Wichita, Kan., has become associated with the Clark Burdgrain Company, which operates several elevators in Kansas and also conducts a general consignment business.

The Corn Products Refining Company of Chicago and New York commenced grinding corn at its new syrup refinery at North Kansas City, Mo., on October 26. It has storage capacity of 500,000 bushels of corn and capacity of 15,000 bushels of corn daily.

C. W. Riley who represents the Milwaukee Grain Commission Company of Milwaukee, Wis., in northern Iowa, southern Minnesota and South Dakota started on a trip November 1, through this territory. He has made those sections for many years and his friends there are legion.

The Armour Grain Company of Chicago, Ill., has purchased through its cereal department, from the receiver of the Cleveland Macaroni Company, the rights to the "Golden Age" brand of macaroni with other brands and the plant, and will add them to its own well established lines of cereal foods.

The Moore-Seaver Grain Company of Kansas City, Mo., will shortly have about 500,000 bushels storage added to the Kansas City Southern Elevator which they operate on December 1, after all work is done and the new machinery installed the elevator will have a total capacity of \$1,200,000 bushels.

The Kansas Terminal Elevator Company of Topeka, Kan., has been incorporated with a capital stock of \$100,000 to carry on a general business in grain. Incorporators are E. J. Smiley, and F. D. Speerz, Topeka; M. W. Hardman, Downs; A. G. Hardman, Burlington and J. F. Jones, Scranton.

George M. Davis, who has traveled for the J. H. Teasdale Commission Company of St. Louis, Mo., for the past five years, has gone to the McClelland & D'Armond Grain Company, and will represent them in Missouri, Illinois, Iowa and Nebraska. Mr. Davis has hosts of friends throughout this territory. He makes his home at Clark, Mo., and will work out from there.

The Carpenter Grain Company of Battle Creek, Mich., has changed its name to the Carpenter Grain & Milling Company and will move its general offices to a building recently purchased on North Monroe street. Besides conducting a wholesale grain business at Battle Creek, the company operates a grain transfer elevator at Edwardsburg, Mich., with storage capacity of 100,000 bushels and handling capacity of 10 cars of grain a day.

E. S. Westbrook, president of the Trans-Mississippi Grain Company of Omaha, Neb., will succeed the late F. S. Cowgill as vice-president of Bartlett Frazier Company of Chicago, Ill., on January 1 and move to Chicago. He will retain the presidency of the Trans-Mississippi Grain Company and all his interests in Omaha. Mr. Westbrook is one of the widest known cash grain men in the West. He has already made application for membership on the Chicago Board of Trade.

We are advised that an item in our Buffalo News Letter of October 15 issue did not represent all the facts in the case. The item referred to six suits brought in the City Court against George E. Pierce, present manager of the Evans' Elevator, for various amounts between \$150 and \$540 for wages and office rent. The facts disclose that the actions were started by a disgruntled employe without the

others knowing the true facts of the matter, and the suits have been withdrawn and the sums have been paid. No other issue was at stake. An earlier item in the same correspondence regarding the later developments in the matter of the Evans' grain elevator were substantially correct.

E. L. Welch, head of the grain firm of E. L. Welch & Co., of Minneapolis, Minn., was recently indicted in connection with the failure of the Security State Bank of Shakopee, Minn. Mr. Welch and former Cashier A. T. Dell were charged with violating the state banking laws by receiving deposits while knowing that the bank was insolvent.

It is announced that Fred Uhlmann, formerly of the J. Rosenbaum Grain Company of Chicago, Ill., will embark in the grain business at Kansas City, Mo., on March 1, 1923. Mr. Uhlmann is one of the incorporators of the Uhlmann Grain Company of Chicago and Kansas City, which will operate the M. K. & T. elevator now under construction at the latter place.

The Gardiner B. Van Ness Company of Chicago, Ill., has retired from business. Mr. Van Ness learned the principles of the grain business in the offices of Hemmelgarn & Co., which he entered October 1, 1885, and which he left in January, 1901, to form the firm of Van Ness & Wilson. This firm was dissolved a few years later when Mr. Van Ness

operated alone until the present company was organized. Mr. Van Ness has been a member of the Chicago Board of Trade since 1896. The Gardiner B. Van Ness Company had a capital of \$100,000, and its officers were: Gardiner B. Van Ness, president; Herbert J. Blum, vice-president; Albert V. Hatch, secretary; George A. Koehl, treasurer. Mr. Blum will be allied more closely in the future with Stein, Alstrin & Co., in which he has been a partner for several years. Mr. Koehl will engage in the brokerage business, while Mr. Van Ness will devote himself to other interests with which he has become connected during the past few years. The company's eight offices in Iowa and South Dakota and five in Illinois, together with their private wires, will be operated by the Bartlett Frazier Company. Open trades will be closed by the Van Ness firm.

Young Davitte, vice-president and sales manager of the Transit Grain & Commission Company of Fort Worth, Texas, made a recent trip among the northern terminal markets visiting Kansas City, St. Joseph, Atchison, Omaha, Sioux City, Minneapolis and other markets. Mr. Davitte has been associated with the grain business of Texas for about 15 years and has seen the Transit Company grow to very large proportions. The firm does a strictly commission and brokerage business. Leo Potishman is the other member of the company and offices are in 504 Neil P. Anderson Building.

and four on an existing two-story merchandise pier. Provision will also be made so that gallery system can be extended to reach other piers in the future.

The railroad company has contracted with the John S. Metcalf Company of Chicago for the preparation of detailed plans and specifications, and expects upon the completion of these drawings, to secure competitive proposals on the construction work.

The work will be under the direction of H. A. Lane, chief engineer of the Baltimore & Ohio Railroad Company, with L. P. Kimball, engineer of building, of his staff, having immediate supervision and L. A. Stinson of Chicago, acting as consulting engineer.

DEATH OF PORTER J. MILLIKIN

Decatur, Ill., went into mourning on October 26, for Porter J. Millikin, president of the Union Iron Works and also president of the Beall Improvements Company, died on that day, after a long illness which an operation could not relieve. Decatur mourned, not superficially because a prominent citizen had passed away, but sincerely and deeply for one that it knew and trusted and loved; one who had given generously of his time and



THE LATE PORTER J. MILLIKIN

great ability for the betterment of the community of which he was so proud. Mr. Millikin applied the sagacity and efficient methods which had made his business enterprises so successful, to the public and patriotic work with which he was connected. He filled a large place in the city's industrial and social life, a place that will be difficult to fill.

Mr. Millikin was born in Dana, Ind., December 15, 1867. After finishing his scholastic work he taught school and, in 1904 was principal of the high school at Cayuga, Ind., when his great uncle, James Millikin, the founder of Millikin University, persuaded him to come to Decatur. He became associated at once with the Union Iron Works, and quickly demonstrated his business ability and executive talent, working his way up through the company's offices until elected president, which position he held at the time of his death. It was largely through his efforts that the Union Iron Works and the Beall Improvements Company have become so well and favorably known in the grain and milling trades.

But he was not merely working for selfish ends; his personal success was but a part of his program of life. He was ever active in boosting Decatur and all the public enterprises that would redound to her credit. During the war he worked tirelessly in behalf of the Liberty loans and for the soldiers' benefits. In short, he was a broad visioned man who had interests that touched every phase of the city's life and who has left an indelible impression on his community.

TRADE NOTES

C. F. Moose has succeeded U. W. Mix as president of the Dodge Manufacturing Company of Mishawaka, Ind. W. W. Dodge becomes vice-president. Other changes were the retirement of former Vice-president W. B. Hosford, Treasurer Chas. Endlick, Assistant Treasurer W. L. Chandler and Foundry Superintendent H. Bell.

The Chicago offices of the Huntley Manufacturing Company of Silver Creek, N. Y., have been moved from the Traders Building into more modern quarters in the Webster Building on LaSalle street, close to the Board of Trade. A. D. McPherson remains in charge and will keep open house to prospective customers of the well known Monitor machines.

The American Supply & Machinery Company of Omaha, Neb., has been recently reorganized and the following officers elected: John W. Gamble, vice-president of the First National Bank of Omaha, president; T. S. McShane, formerly with Sunderland Machinery & Supply Company, vice-president. J. Schwartz, who was nine years with the old concern, remains with the new company.

The Link-Belt Company of Chicago, Philadelphia and Indianapolis, announces the completion of a new General Catalog No. 400 which embraces its entire line. It is the most complete book they have ever issued on this subject. It contains 832 pages, is cloth bound and can be obtained from any Link-Belt branch office. This catalog not only includes the complete Link-Belt line, but also the products of the H. W. Caldwell & Son Company plant of that company which specializes in the manufacture of Helicoid and other screw conveyor equipments, elevator boots, buckets, casings, etc., and general power transmission machinery.

Wedding bells were ringing last month in the offices of the B. F. Gump Co. of Chicago and now W. M. Williams, treasurer and general manager of the company, has returned with his bride from the honeymoon trip, which included a number of points in the East. Mrs. Williams was formerly Miss Anna W. Waarich. Julius H. Reed had charge of the very appropriate ceremonies in which the Gump Andy and Min Club greeted Mr. Williams on his return to the office. As a married man who has celebrated his Golden Wedding Anniversary, Mr. Reed has a diploma which asserts his reliabil-

ity and knowledge on what is due on such occasions. The AMERICAN ELEVATOR AND GRAIN TRADE joins the hosts of friends of Mr. Williams in the milling and grain fields in wishing him and his bride a long life of health and happiness.

The many friends of W. W. Sayers, of the Link-Belt Company, Chicago, Ill., will be glad to learn of his promotion to the position of chief engineer of the company's Philadelphia works and eastern operations. For many years Mr. Sayers was a popular representative of the company in their Chicago territory, in the lines related to power house machinery, coal storage, Peck Carriers, crushers, etc., and later in charge of the Locomotive Crane Department. His headquarters will be at the Philadelphia office for the future.

NEW B. & O. ELEVATOR AT BALTIMORE PLANNED

The Baltimore & Ohio Railroad Company have just announced their plans for the reconstruction of their grain elevator facilities at Locust Point, Baltimore, Md.

The original plant, which consisted of two wharf type wooden elevators with a combined capacity of more than 2,000,000 bushels, was completely destroyed by fire July 2, 1922, after being in service nearly 50 years.

The reconstruction will be in the form of a concrete elevator of the most modern type, with the most approved safeguards to prevent possible dust explosion. The workhouse will have 1,000,000 bushels storage capacity, equipped with scales, gars, cleaners and clippers with adjacent storage annex which will be 3,000,000 bushels capacity. Arrangements will be made for the future increase of this storage capacity to a total of 8,000,000 bushels. The facilities will include complete facilities for the drying and cleaning of grain and provision will be made for the unloading of grain from boats.

Consideration is being given to the use of mechanical unloaders for the grain received in box cars, but no decision has as yet been reached as to the type of unloader selected.

The shipping facilities will consist of galleries and belt conveyors to reach eight berths, four of which will be located on an exclusive grain loading pier, which will be constructed for that purpose,

HOME GROWN SEED

BY TRAVELER

The matter of furnishing farmers pure, home grown Clover seed is something that dealers in the seed-growing states should look into very carefully. Farm bureaus and certain other "officials" have tried their hand at it, and so far, have succeeded in making a nice mess of it, so that today the quality of the seed furnished is vastly inferior to that supplied farmers before the various seed laws were put into effect.

In certain sections of the seed-growing territory, buckhorn was almost unknown a few years ago; but today it is hard to find Clover seed that is wholly free from it, and local dealers hesitate to guarantee any Clover seed free from at least a trace of this noxious weed.

Cornrowel is another very objectionable weed seed which has appeared in large quantities this year. Like buckhorn, it is extremely difficult to separate from Clover seed, being of practically the same size and weight.

Dodder and trefoil, so far, have gained but little headway in the Middle West, but both of these may be found occasionally. Many of the dealers in this territory are wholly unfamiliar with these two last named seeds, and would not easily detect them.

Before the present seed laws were put into effect, the problem of supplying the farmer with pure seed rested altogether with the local dealer. It was a task to which he devoted much time and careful consideration and to which he also gave his personal attention.

This was not done from an altogether altruistic motive either. A certain element of selfishness actuated him in his careful selection of this seed. For this reason, he had learned from experience the truth of the saying: "As you sow, so also shall you reap." In other words, if his territory was to gain a reputation for high quality seed, it was imperative upon him to see that his farmers sowed only that kind.

With this object in view, he systematically set aside the choicest lots received during the seed harvest, and at his leisure cleaned and re-cleaned this seed until it was in perfect condition to supply the wants of his farmer trade during seeding time. In this way he was able to tell the farmer just where the seed was raised and who raised it. And he was also able to say, with a certain degree of positiveness, whether the seed was mammoth or medium, as he would have the grower's own statement for it.

This matter of distinguishing between medium and mammoth seed is another item which confronts the buyer of Clover seed. It is well known among the trade that only the man who grows it can state positively whether seed is mammoth or medium. After the seed has changed ownership several times, the question of determining which is which becomes pretty much a matter of guess work.

It can readily be seen, therefore, that the local dealer is the only logical medium for supplying the farmer in the large seed-growing states with their seed. Through him, and through him only, can they be assured of getting pure, home grown seed, as well as mammoth and medium of known origin.

There are numbers of dealers who still pursue this method of selecting seed for their local trade, but during the last few years their efforts have been seriously handicapped by farmers sending away and obtaining cheap seed of doubtful quality and origin. However, these farmers now see their mistake and will return to the home dealer when they next buy seed; but it will be some time before they are able to overcome the harm done their meadows by sowing this inferior grade of seed.

MOTH AND WEEVIL BEWARE!

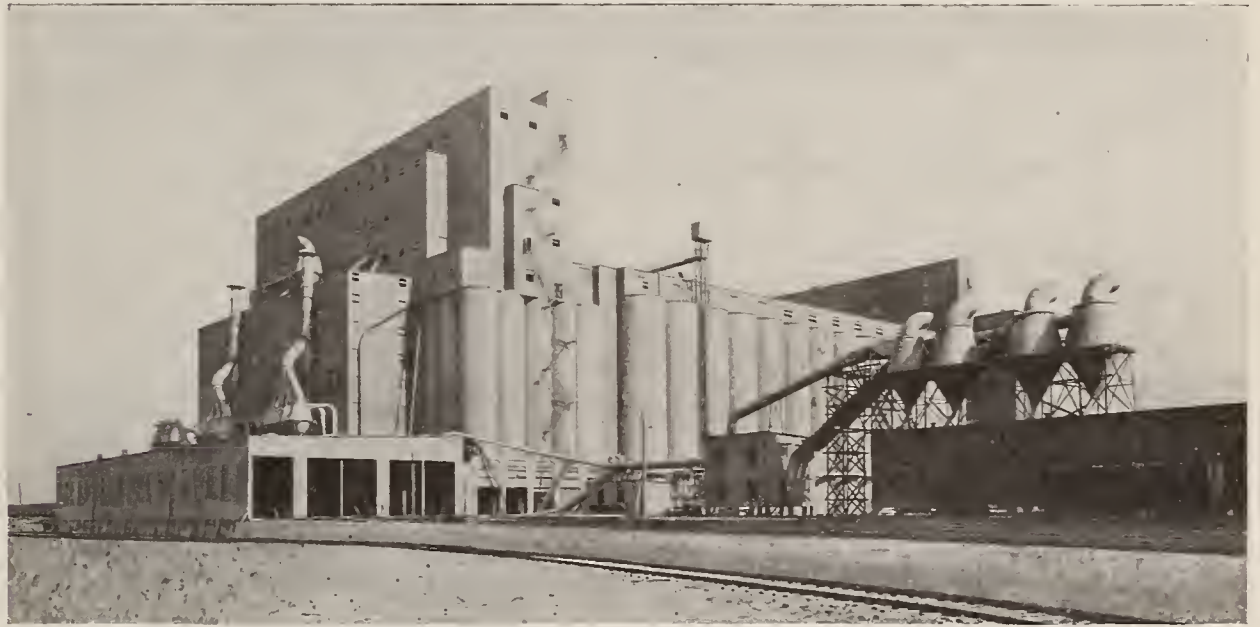
Grain dealers and the milling fraternity lose annually thousands of dollars through the depredations of weevil, moths and other insects. There are certain chemicals which will kill the bugs all right, but most of them are either dangerous to human life or are highly explosive and forbidden by fire

underwriters. The Texas Chemical & Specialty Company of Fort Worth, Texas, has recently put upon the market a preparation which is called "S-O-S Insect Exterminator," which seems to meet all of the objections of former preparations, and is highly recommended after numerous tests by V. L. Nigh, chief grain inspector at Fort Worth, and by the Fort Worth Laboratories.

The preparation is used as a spray and is said to be non-poisonous (except to bugs), non-inflammable, and non-stainable. It has a pleasant odor, but the odor and taste entirely disappear after short exposure to the air. We have not tried this exterminator ourselves, but we have seen the endorsement given it by Mr. Nigh and by Mr. Porter of the Fort Worth Laboratories. If it is as good as they say it is, and we have no reason to doubt it, grain dealers will be glad to know about it, so we are passing along what looks like a good thing.

REPAIRS OF N-W ELEVATOR
COMPLETED

The Chicago & Northwestern Elevator at Chicago, operated by the Armour Grain Company, was partially wrecked early in 1921 by one of the worst dust explosions in the history of the grain industry. Reconstruction was begun immediately by the Witherspoon-Englar Company from plans made by the John S. Metcalf Company and this reconstruc-



RECONSTRUCTED CHICAGO & NORTHWESTERN ELEVATOR AT CHICAGO

tion has just been completed and the elevator put to work in its entirety. The working house was completed early this year so that grain has been handled through certain units of the house for some months.

The units which were destroyed and necessitated complete or partial reconstruction, included the 16 storage tanks in the southeast corner of the plant; about a third of the river house; tunnels; galleries; cupola; legs; spouting; office building; power house; shop building; steel train shed; and welfare building.

In all the upper workings of the new units tile construction was used instead of concrete. The only important structural change is in the drier building which is much more efficient than it was, with four new Reliance Scales made by the Stearns Motor Company, six improved Hess Driers and six Ellis Driers. All the conveying machinery was furnished by the Webster Manufacturing Company.

The Ellis driers incorporate several new features. The continuous feed apparatus is of an entirely new type operating with an independent motor for each drier. It is of the swing gate type and possesses a most valuable feature in that it cannot be blocked or damaged by sticks or pieces of iron. The rate of feed through this device can be regulated with nicety from 10 to 1,000 bushels per hour. Power for the feed is supplied through a variable feed device in conjunction with a worm and gear box. The entire feed apparatus is very compact.

Complete provision is made for the separation of dust from the drying air by an ingenious device

installed between the cooler and fan. Dust spouts are carried from the traps to the floor below where it is sacked. Large garnerers are provided over each drier unit and bins of ample capacity are located below each drier so that the entire battery of driers may be operated at long intervals without the aid of elevating or conveying equipment in the work-house.

The cupola of the working house has much new machinery, including six Invincible Needle Separators; four 48-inch Richardson Separators; and four double Carter Disc Separators. Instead of four No. 15 and six No. 11 Monitor Separators, the plant has 10 No. 11, Style C Monitors for wheat and two No. 11, Style B, for barley. The 20 No. 11 Monitor Oat Clippers remain.

A complete vacuum dust-collecting system was installed by the B. F. Sturtevant Company, in addition to an exceptionally comprehensive dust collecting system. More dust will be removed from the grain than has ever been taken out before in a terminal elevator it is believed. Perhaps this will prove too expensive to continue, but in the interest of safety it will be given a thorough trial.

CANADIAN ELEVATOR CHARGES

Under the Canada Grain Act all licensed elevators in the Dominion must conform to the Act, which provides that all grain offered must be taken into

store under the conditions prescribed for the year October 1, 1922, to August 31, 1923, as follows:

Special Grain Bin—Receiving, elevating, spouting, insurance against fire, storing for the first 15 days, and putting into cars on track; no elevator shall charge more than two and one-half cents (2½ cents) per bushel for wheat, barley, flax and rye, and one and three-quarters of a cent (1¾ cent) per bushel for oats.

Graded Storage and Subject to Grade and Dockage Grain—Receiving, elevating, spouting, insurance against fire, storing for the first 15 days, and putting into cars on track; no elevator shall charge more than one and three-quarters cents (1¾ cent) per bushel.

Storage not otherwise provided, including insurance against fire, for each succeeding day after the first fifteen (15) days shall not exceed one thirtieth of one cent (1/30 cent) per bushel.

Grain specially cleaned will be subject to a charge of one-half cent (½ cent) per bushel for each cleaning.

ARGENTINE EXPORT TARIFFS

Evidently Argentine is feeling easier about its coarse grain supply and is doubtful of its small grain crop. This month the following changes in the export duties on grain became effective:

Oats, in bags, former duty, 1.34 gold pesos per metric ton, present duty, 1.26; oats in bulk, former 1.29, present 1.20; corn in bags, former 1.22, present 1.11; corn in bulk, former 1.12, present 1.01; lin-

seed in bags, former 2.28, present 3.14; linseed in bulk, former 2.03, present 2.89; wheat in bags, former .62, present .95; wheat in bulk, former .35, present .68; barley, former 1.00, present 1.04; wheat flour, former .62, present .95; bran and pollards, former .22, present free; goatskins, former 40.00, present 50.00; tallow, former 2.70, present 2.40; quebracho extract, former 4.08, present 1.86; and quebracho logs, former .43, present .50. The duties on other export products remain unchanged.

CLAIMS AGAINST RAILROADS FOR FAILURE TO FURNISH CARS

BY OWEN L. COON

When is a railroad liable for failure to furnish cars? In this article, the answer to this question will be given and the general question of the carrier's liability for failure to furnish cars will be discussed. In the succeeding article, the problem of enforcing this liability in a practical way will be considered.

Under the Interstate Commerce Act and its amendments, cars must be furnished "upon reasonable request." What constitutes "reasonable request" varies with conditions, the Interstate Commerce Commission being the governmental body charged with the task of deciding what is reasonable.

In normal times, when no car shortage exists, if a written order for a car is given, say, five days or a week in advance of the time that it is actually needed, and the railroad is notified that failure to furnish the same will cause a special loss, there can be little doubt but what there is a good claim for any loss sustained if the car is not furnished. But in times of car shortage, what constitutes the furnishing of cars upon "reasonable request" becomes quite an entirely different matter.

The Commission has given several decisions relative to car distribution, and using these decisions as a foundation the Car Service Committee of the American Railway Association has promulgated certain rules as to the distribution of cars in times of car shortage. These rules in brief are as follows:

"Each shipper of grain will advise the carrier's agent each Saturday of the total quantity of grain on hand intended for rail shipment. The ratio of the quantity so reported by each shipper to the total quantity reported by all shippers shall be the percentage basis for the distribution of available cars at that station during the ensuing week for grain loading. Each shipper must file his orders for cars in writing, showing among other things the quantity of grain on hand and conveniently located for prompt loading. The term 'prompt loading' is intended to mean that a car placed for loading not

later than 10 a. m. must be loaded and billing instructions tendered before the close of the day on which it is placed."

If it can be shown that such rules have not been complied with by the carrier and that other shippers similarly situated have received more cars than you have, on the basis of grain tendered for shipment, then a claim for loss sustained from failure to receive cars is undoubtedly good. As a general proposition it may be said that carriers are liable for any loss arising from their failure to furnish cars during times of car shortage where discrimination in the distribution of such cars under the above rules can be shown. There is a case on record where the Pennsylvania Railroad was compelled to pay \$145,000 for loss of profits to a coal company discriminated against in favor of a competitor in the distribution of coal cars.

The old rule of distributing the same number of cars to each shipper regardless of the amount of grain on hand and tendered for shipment does not now exist. Under the above rule, if all the shippers on a division of railroad on a certain Saturday night tendered 500,000 bushels of grain, and you had on hand 10,000 bushels while your local competitor had only 5,000 bushels on hand, you should receive one fiftieth of the cars available for that division the coming week, and your competitor only half as many as the number to which you would be entitled. That shipper is to receive the most cars who has on hand the largest amount of grain. It is a rule which injures the shipper with the small house who would otherwise control the larger proportion of the business if cars could be obtained, but it is the rule at present—whether it be good or bad.

Under the above rules, you may tender grain which is actually in your elevator and in addition that which is "convenient for prompt loading," this phrase being defined to mean grain not in the elevator but which can be received and loaded into a car the same day that it is set out for loading. You can, of course, easily see the loophole in the rule. In practice, I am afraid that the man who has had a large quantity of grain "convenient for prompt loading" and can make his railroad agent believe it, has in the past received the largest number of cars.

If other shippers, however, complain that such a practice is being pursued, and that the agent at another station is accepting tenders of grain in excess of the amount to which the shipper would be entitled, the railroad on investigation must penalize the offending shipper by a reduction in the number of cars to which he would otherwise be entitled in the future.

In a succeeding article, suggestions will be given

as to the manner in which this liability of the carrier can be enforced in a practical way if discrimination under the above rule actually exists.

EUROPEAN AGRICULTURAL NOTES

The grain movement in Rumania, says Consul Ely E. Palmer, is only 25 per cent as great as that moved in September of last year, due to export taxes and to the fluctuations of the exchange. During the first seven months of 1922, 594,000 tons of agricultural products were exported, compared to 916,664 tons for the same period last year. In July, the wheat crop forecast was 88,000,000 bushels; the latest estimate is 74,000,000 bushels. The expected surplus of nearly 7,000,000 bushels has thus been wiped out. As a result of the small crop the Government has placed a maximum internal selling price of wheat of 25,000 lei per car of 10 tons, about 45 cents per bushel, and has prohibited the exports (except by itself). Since this decree, the price of other cereals has gradually risen beyond this figure. As a result the farmers are holding their wheat, hoping for a revision of the Government decree. There is, therefore, a wheat and flour shortage and the Government is requisitioning wheat at a premium of 5000 lei.

The German Agrarians seek a revision of the Grain Requisition Law of July 4 says our Trade Commissioner at Berlin. The price fixed by the Government for wheat was M 7400 per ton, whereas the market price has varied (from July 1 to August 10) from M 19,100 to M 35,000 per ton. Likewise the price the Government had fixed for the payment of the rye which it requisitioned was M 6900 per ton, whereas the market price by August 10 had risen up to M 27,000 per ton. The first portion of the 2½ million tons of requisitioned grain is due from the farmers by October 31, the second portion on January 15, 1923 and the final amount on February 28, 1923. While it may be too late to alter the requisition price of the first installment it is confidently believed that the price for the second and third requisitions will be increased to agree somewhat with market prices.

The grain crop of Yugoslavia, according to Special Representative A. P. Dennis of the Department of Commerce, October 20, is now estimated as follows: Wheat 55,000,000 bushels against 51,400,000 in 1921; rice 4,400,000 compared to 5,800,000 in 1921; barley 10,600,000 this year, 13,300,000 last year; oats 16,800,000 against 25,800,000 in 1921. No actual figures are available for the corn crop, but officials estimate the yield at 35 per cent less than in 1921. The acreage of the four principal grain crops this year was 2 per cent less than last; the yield 12½ per cent less.

That part of France which suffered so severely during the war, viz., the Department of the North, in which Lille is situated is being rapidly reclaimed. Of the 331,000 hectares (ha. equals 2.47 acres) laid to waste, some 330,000 have this year been growing crops. While the acreage of rye, wheat and oats is only 85 per cent of the pre-war times, that of potatoes and beets as well as that of barley is greatly superior to that of 1912.

Seed grain in exchange for an equal amount of crop grain is the method now employed in Hungary to increase next year's production by 100,000 tons, says Consul Edwin C. Kemp of Budapest in a report of September 19. Every effort is being made to import raw superphosphate as the farmers are showing added interest in the use of fertilizers. Some 300,000 acres of large estates will be distributed among small farmers in accordance with the peaceful Land Reform program inaugurated in Hungary.

Czechoslovakia is composed of five separate provinces: Bohemia, Moravia, Silesia, Slovakia and Rumania. Three-fourths of the wheat; 68 per cent of the rye; 70 per cent of the barley and 70 per cent of the oats are produced in the two provinces Bohemia and Slovakia. Moravia produced one-fifth of the barley, rye and oats crops. Slovakia produces 62 per cent, and Rumania 29 per cent of corn. The foregoing facts are obtained from a recent report.

Of the 3,749,000 acres devoted to wheat growing

WHEAT CROP AND EXPORTS OF THE UNITED STATES

Year	Acre	Yield Bushels	Farm Value per Bu. Dec. 1st	Exports Wheat & Flour Bushels	Share of Exports in form of Wheat Flour	Population U. S.
1880	37,987,000	498,550,000	95.1	186,322,000		50,155,783
1881	37,709,000	383,280,000	119.2	121,892,000		
1882	37,069,000	504,185,000	88.4	147,811,000		
1883	36,456,000	421,086,000	91.1	111,534,000		
1884	39,476,000	512,765,000	64.5	132,570,000		
1885	34,149,000	357,112,000	77.1	94,566,000	65.93	34.07
1886	36,806,000	457,218,000	68.7	153,805,000		
1887	37,642,000	456,329,000	68.1	119,625,000		
1888	37,336,000	415,868,000	92.6	88,601,000		
1889	33,580,000	468,374,000	69.8	109,431,000		
1890	36,087,000	399,262,000	83.8	106,181,000		62,947,714
1891	39,917,000	611,781,000	83.9	225,666,000		
1892	38,554,000	515,947,000	62.4	191,913,000		
1893	34,629,000	396,132,000	53.8	164,283,000	59.50	40.50
1894	34,882,000	460,267,000	49.1	144,813,000		
1895	34,047,000	467,103,000	50.9	126,444,000		
1896	34,619,000	427,684,000	72.6	145,125,000		
1897	39,465,000	530,149,000	80.8	217,306,000		
1898	44,055,000	675,149,000	58.2	222,618,000	59.03	40.97
1899	44,592,000	547,303,000	58.4	186,097,000		
1900	42,495,000	522,230,000	61.9	215,990,000		75,994,575
1901	49,896,000	748,460,000	62.1	234,773,000		
1902	46,202,000	670,063,000	63.0	202,906,000		
1903	49,465,000	637,822,000	69.5	120,728,000	55.06	44.94
1904	44,075,000	552,400,000	92.4	44,113,000		
1905	47,854,000	692,979,000	74.8	97,609,000	35.85	64.15
1906	47,306,000	735,261,000	66.7	146,700,000	52.38	47.62
1907	45,211,000	634,087,000	87.4	163,043,000	61.63	38.37
1908	47,557,000	664,602,000	92.8	114,268,000	58.57	41.43
1909	44,262,000	683,379,000	98.4	87,364,000	53.50	46.50
1910	45,681,000	635,121,000	88.3	69,312,000	34.24	65.76
1911	49,543,000	621,338,000	87.4	79,689,000	37.85	62.15
1912	45,814,000	730,267,000	76.0	142,880,000	64.11	35.89
1913	50,184,000	763,380,000	79.9	145,590,000	63.65	36.35
1914	53,541,000	891,017,000	98.6	332,465,000	78.11	21.89
1915	60,469,000	1,025,801,000	91.9	243,117,000	71.33	28.67
1916	52,316,000	639,886,000	160.3	203,574,000	73.60	26.40
1917	45,089,000	636,655,000	200.8	132,580,000	26.25	73.75
1918	59,110,000	917,100,000	204.4	287,438,000	62.20	37.80
1919	72,308,000	934,265,000	215.1	219,881,000	55.69	44.31
1920	61,143,000	833,027,000	143.7	366,077,000	80.11	19.89
1921	62,408,000	794,893,000	92.7	279,406,000	74.80	25.20

—Soil Products Bulletin from First National Bank in St. Louis.

in Yugoslavia over 96 per cent is Winter wheat. Over 60 per cent of the barley is the winter variety. Only 30-40 per cent of the cereal crop acreage of Yugoslavia is situated in old Serbia.

In every province of Germany the estimate yield per acre of wheat and rye is less than the actual yield last year. The average decrease in the case of wheat is 30 per cent and that of rye 20 per cent. The impression is gaining ground that the yields this year are being intentionally under-estimated for the purpose of defeating the Government's recent tax payable-in-kind measure.

The Hungarian crops, as reported by Consul Clerk, J. J. Ronto of Budapest on September 21, are as follows in million bushels: wheat 43.9; rye 22.3; barley 21.3; oats 22.5 and corn 30.7. These figures represent an increase of 24 per cent in the yield of oats; 5 per cent in that of barley; 6 per cent of rye; but a decrease of 2 per cent in the yield of wheat, as compared to 1921.

Reports from the Government's representatives in Europe indicate that wet weather has considerably injured the quality of the crops in many of the countries. In Poland large amounts of rye are reported as being used as cattle feed. In Austria, wet weather during the harvest did considerable damage to the grain. The same kind of report is received from Denmark and Sweden. In the latter country some of the grain contains as much as 20 per cent moisture. Reports from France indicate a similar condition of the crops. On the other hand the corn crop of Rumania has been almost ruined by the long dry spell prevailing during July-August in nearly every section of the country.

KING CORN

Consumed either directly or in the form of meat and other animal products, corn is the principal source of the Nation's food supply. The vital importance of the corn crop and its relation to American prosperity has been reviewed by the United States Department of Agriculture in the 1921 Yearbook, just published. In a graphic survey the Department has presented the story of corn in all its details.

Of approximately 6½ million farms in the United States, nearly 5 million produce corn. Nearly 100,000,000 acres of farm land is devoted to the production of this single crop, which in recent years has reached more than 3,000,000,000 bushels. During the war the value of the crop reached more than 3,000,000,000 dollars, or one-eighth the present national debt. The 1920 crop, the largest ever produced, had a value of \$2,150,000,000; the 1921 crop \$1,303,000,000.

It is shown that 40 per cent of the total crop is fed to swine on farms, 20 per cent is fed to horses and mules on farms, and 15 per cent to cattle on farms. Only 10 per cent is used direct for human food, but 85 per cent is used through the consumption of meat and meat products. Corn is the basis of the Nation's livestock industry. Figures and charts on production show that the United States produces about three-fourths of the corn crop of the world. There are no large competing countries, but corn is an important crop in Argentina, Brazil, Mexico, and some of the southern European countries, though not yet in serious competition with the United States product. It is shown that less than half of the corn land in the Corn Belt is allotted to corn in any given season, and that over 50 per cent of the crop land is occupied by small grains and hay.

The things that determine the amount of corn produced in the United States are discussed in detail: (1) the acreage planted, and (2) the acre yield. While the acreage planted is determined by farmers, the acre yield is determined by the quality of the soil; the weather; insect pests and plant diseases. The estimated loss caused by common smut alone during the 4-year period, 1917-20, is placed at about 80,000,000 bushels annually, or nearly 3 per cent of the average crop. While no practical method of controlling corn smut has yet been discovered, the most promising outlook along this line lies in the development of productive, smut-

resistant strains. Of insect pests, the corn-ear worm, where abundant, causes a loss of at least 7 per cent of the grain on the ears attacked. The European corn borer also threatens to take heavy toll of the crop.

Cost of production factors are presented in a form useful to farmers in estimating costs and returns. Facts concerning the commercial movement of corn and some of the market factors that influence and determine corn prices are discussed. The subjects considered are (1) Quality and grading of corn (2) surplus and deficiency of corn in different areas (3) monthly marketings of corn (4) moisture content and shrinkage in storage (5) exports and imports of the United States and Argentina, and (6) freight rates. The article makes interesting reading. Write your congressman for a copy of the Yearbook.

NEW HAY EXCHANGE AT CHICAGO

The tentative Federal hay grades, presented to the trade last August by Dr. W. A. Wheeler, H. B. McClure, W. H. Tenney, and K. B. Seeds of the U. S. Department of Agriculture, have received a great amount of attention. In the hearings that were held, the analyses of hay bales and the wide discrepancies made by hay inspectors and shippers on the actual grades, was a startling rev-



PRESIDENT JOHN H. DEVLIN

elation to the trade, and was the most potent argument for a trial of the new grades before the Government's suggestions should be condemned.

To this end there was organized at Chicago, on October 25, the Chicago Hay Exchange, of which John H. Devlin of Albert Miller & Co., is president; H. L. Randall of T. D. Randall & Co., vice-president; and M. M. Freeman, secretary. The new organization takes the place of the Chicago Hay Receivers Association and will be incorporated under the laws of Illinois. The Board of Directors consists of the above officers with William Haynes of the Swift-Haynes Company; and Clarence Mumford of W. R. Mumford & Co.

The new grades were presented as being tentative only, and with this in mind the Chicago Hay Exchange has entered into an agreement with the Department of Agriculture to use the new grades under the supervision and with the assistance of the Department. Similar arrangements have been made between the Department of Agriculture and five of the larger eastern markets, for the Department has no money of its own to carry on this work and the expenses in each case will be borne by the markets. This arrangement terminates on June 30, 1923, if either party gives 30 days' notice to that effect. But practically a full hay year will have been tested under the new grades and that will give the hay trade a better insight into the practicability of the grades.

Hay cannot be separated into its component parts and weighed for percentages as grain can. Under

any grading system the human element enters into the equation to a large extent, and only the judgment and color sense of the inspector can be the criterion. But the Department found that the vast majority of hay handlers, shippers more than inspectors of course, were basing their judgment upon mistaken premises. Judgments were fairly consistent in most cases, but they were consistently wrong. Until the Department took the matter up there had never been a systematic analysis of hay bales and it was demonstrated that only by a study of these analyses and of the bales from which they were made could inspectors and dealers overcome the erroneous judgment used in inspection. It is a part of the agreement, therefore, that inspectors using the tentative grades shall first take a course in the Department's hay laboratory at Alexandria, Va. Harry Whiteside, the Chicago hay inspector, will take the course with the inspectors from the other cities.

In the grade hearings there were many objections offered to the grades. Perhaps a trial will prove these objections valid and the year's experience may suggest several important changes. In the meantime, however, the Chicago Hay Exchange will give the grades a fair trial and hay shippers will benefit by whatever virtue there is in them. No doubt one important development will have to be the settlement upon plugging tracks where cars can be inspected from end to end and not merely at the door.

The officers of the Chicago Exchange are all broad minded men with the vision to see that what is best for hay shippers is eventually best for the terminal markets. Every facility will be given shippers to benefit to the widest extent by the application of the new grades, and the Exchange will devote its energies to the improvement of marketing conditions, not only in Chicago alone, but in the country as a whole.

FREIGHT CLAIM PREVENTION*

BY A. R. McNITT

(Freight Claim Agent, Union Pacific Railroad)

Up to about two years ago but little was known, especially by the general public, of freight claim prevention. Only a limited number of the transportation companies made any pretense of specializing along that line of endeavor, and these pioneers in a most worthy cause labored under many discouragements. Nevertheless, they tenaciously clung to their ideas and preached the gospel to other carriers, also the shippers, at every opportunity. Finally the subject attracted the attention of the officers of the American Railway Association, who, after becoming convinced that rapidly increasing losses from freight claim payments were causing inroads in the carriers' revenues that could not be properly defended, placed the subject with the freight claim division of that organization with the admonition to get busy and prescribe a formula that would effect a cure for the trouble, at the same time assuring the freight claim division of the unqualified support of every other branch of the parent organization in order to obtain the desired results.

Today the pioneers mentioned have the satisfaction of knowing that practically every railroad in the United States and Canada is equipped with an organization that insures a systematic campaign for the elimination of the irregularities of an avoidable nature that are the cause of loss and damage to freight. In addition to the efforts of the individual carriers, there has been set up in the freight claim division of the American Railway Association a permanent organization consisting of experienced men who are devoting their entire time to the study of this work. From the reports made to that organization by the individual carriers, they are enabled to visualize the proposition from the country at large, determine where the principal troubles exist, investigate their causes, and then suggest to the shippers or carriers concerned the corrective action that should be taken.

The underlying principle of freight claim prevention contemplates the development of co-opera-

*Extracts from an article which appeared in the *Chicago Journal of Commerce* on November 10.

tion and increasing efficiency among freight service employes by the individual efforts of the regular supervising forces. In that way employes can be made to realize more fully their obligations in the proper conduct of their work.

Transportation failures, causing loss or damage to freight, are as numerous as the opportunities which permit their occurrence, but they have been condensed under the following classification and so reported by all member lines to the freight claim division of the American Railway Association:

Unlocated loss.

Entire package.

Other than entire package.

Unlocated damage.

Other damage.

Rough handling of cars.

Improper handling, loading, unloading or stowing.

Defective or unfit equipment.

Improper refrigeration or ventilation.

Freezing or heater failures.

Delay.

Robberies.

Entire package.

Other than entire package.

Concealed loss.

Concealed damage.

Wrecks.

Fire or marine loss or damage.

Errors of employes.

These represent what are considered avoidable transportation failures which the carriers are systematically endeavoring to reduce by the methods mentioned.

The carriers must take the position that they stand convicted of negligence for every freight claim payment. Admitting, however, that they are directly and wholly responsible for the greater part of such losses, the shippers are primarily responsible, to a certain degree, hence the necessity for their co-operation in this movement in order to obtain the full measure of success.

The acceptance of freight that is improperly packed and also tendered in frail or insecure containers is an agreement to make a delivery to the shipper's customer intact, although it may be impossible of accomplishment.

The same applies to the shippers of carload freight. No shippers would think of storing their goods in a warehouse that did not afford proper protection, yet not infrequently they will load their products in an unclean or defective car, causing heavy damage, which the carriers must assume, to say nothing of inconvenience and dissatisfaction brought upon their customer. All of this could be avoided by a small amount of labor that would be required to clean the car, remove projecting nails or, if necessary, call upon the carrier either to make temporary repairs or replace the defective car with a proper one.

Uniformity of opinions regarding legal liability in all cases never will be obtained, but improvement in these shortcomings has been and will continue to be made as a result of closer affiliation of the carriers freight claim department which has been brought about by this campaign for the reduction of claim losses. A study of all causes has brought out these deficiencies and prompted action to insure more thorough claim investigations and better supervision of the adjustments made.

There is no longer any doubt of individual and unified action by the carriers to the end that their handling of freight will be placed on a basis of high efficiency and more in keeping with the other branches of railroad service.

Editor American Grain Trade: Please enter my order for one year's subscription to your journal. I own the elevator at Block, Ill., and will build one at Kemp, Ill., where Munson & Moss elevator burned in September. E. G. COON, Lovington, Ill.

THE German wheat crop of 1922 is 46 per cent of that of 1913; the rye crop 53 per cent, barley, 52 per cent, and oats 48 per cent. In 1921 the percentages of the 1913 production were as follows: wheat, 74; rye, 68; barley, 64; oats, 38. Thus while Germany lost less than 15 per cent of its agricultural

area, it is now producing only about 50 per cent as much grain as pre-war. Ninety-eight per cent of the oats and 87 per cent of the wheat is grown as a winter crop.

THE FUTURE OF WHEAT IN AMERICA

One of the outstanding facts facing the American wheat grower is that while population and per capita consumption of wheat in the United States have steadily increased, there has been a gradual decrease in per capita production, according to the United States Department of Agriculture. Wheat is a world commodity and the interplay of economic forces both of national and international character must be carefully considered to forecast the future.

The economic situation of the wheat crop, production and marketing, from seeding to international trade, is presented in the 1921 Yearbook of the Department of Agriculture. This discussion is the result of combined research and study of a number of the Nation's leading agronomists and agricultural economists connected with the department. It is illustrated with numerous maps and charts so that it is clear to those without special training in agricultural economics.

Among the significant facts presented it is shown that nearly a third of the farmers in the United States now grow wheat. In some areas more than 80 per cent of the farmers are engaged in wheat growing. Only corn and hay exceed this bread crop in acreage occupied, and normally only these two crops and cotton exceed wheat in value. In leading wheat areas whatever affects yields, cost of productions or the price, not only affects the welfare of all the farmers who grow the crop, but the whole community. Similarly the wheat crop as a whole has much to do with the prosperity of the Nation, because the grain enters into foreign trade to a greater extent than any other crop except cotton.

This country has exported a surplus in every year of its history since colonial times with the exception of 1836, besides keeping pace with an ever-increasing demand at home. During the past 20 years, however, the volume of exports has been decreasing, except under the artificial stimulation of the recent war period. Wheat production has been increasing less rapidly than population, and this tendency will probably continue, at least until we reach the point where we consume practically all we produce. Because of improvements in milling processes which make bread more attractive, because of increasing prosperity, and because of the increasing proportion of our population in cities, the per capita consumption of wheat has increased in the United States for the past 80 years.

It is certain that city dwellers eat more wheat per capita than those who live in villages and in the country. There are a number of reasons for this—the lack of gardens in cities, the comparative cheapness of bread, and the fact that no home cooking is required. The fact that the trend of population movement is toward the cities should have a bearing on the future consumption of bread.

How much wheat will we eat if we can get all we want?—is asked. Before 1850, the per capita consumption in this country was 3.8 bushels; from 1875 to 1884 it was 4.9 bushels; and from 1895 to 1914 it was 5.6 bushels. The rising trend was interrupted by the World War, but department authorities believe it has been resumed. How much longer will it continue? In Belgium and France consumption has reached 8 bushels per year per person.

If we are to increase our bread ration to any great extent we must grow more wheat, the Department says. We did grow more during the war, but the increase was partly at the expense of well-balanced rotations and other principles of sound farming. As wheat prices advance, concludes the Department, "production can be increased through the use of more fertilizer and the farming of less

productive land. As production and consumption tend to become equal new sources of supply must be sought in order to feed the increasing population. The needed supply may be grown at home or imported from Canada, Argentina, and other countries."

IMPROVE THE QUALITY OF WHEAT

H. M. BAINER

Director, Southwest Wheat Improvement Association

That the reputation for high quality wheat enjoyed for many years by Kansas and other states of the Southwest is likely to be lost if more attention is not given this important matter is the opinion of many men in the grain and milling trade. The quality is not what it used to be—a fact especially apparent this past year—and they fear a further decline such as has already taken place in the Spring wheat belt of the North. While nobody is alarmed and there appears to be no immediate occasion for alarm, the matter does deserve careful consideration by everyone whose welfare or interest is in any way connected with growing wheat.

This decrease in quality is taking place in spite of better varieties and better cultural methods. It can be attributed, say those in the best position to know, only to the declining fertility of the soil which has accompanied the almost exclusive wheat growing of the past 25 years. For many years it was thought that increasing the protein content and thereby the quality of wheat by fertilizing the soil was much like attempting to put butter fat into Holstein milk by feeding rich feeds—it couldn't be done. Recent experiment work, however, has demonstrated very clearly and decisively that protein in wheat does depend upon the plant food elements in the soil—especially the nitrogen content, and that an adequate supply of nitrogen supplied at the right time and in the right way may increase the protein content an appreciable amount, considerably improve the milling and baking quality and consequently increase the market value of the wheat. The California Experiment Station, for example, found that by the addition of nitrogen to the soil, the protein content of the Soft White wheat of that state could be increased from about 11 to over 15 per cent and the grade raised from No. 2 Soft to No 1 Hard. Experiments by the U. S. Department of Agriculture and by the Kansas Experiment Station have shown a similar effect on Hard Winter wheat and farmers have frequently observed that ground previously in Alfalfa produced a darker and better quality wheat than other ground not in Alfalfa.

The above results are especially gratifying because nitrogen is one of the chief limiting factors so far as yield is concerned and because good methods of farming which include rotation with legumes and early plowing is one of the very best and cheapest ways of insuring an adequate nitrogen supply.

The farms of the Southwest are in serious need of attention is well shown by an extensive investigation by C. O. Swanson of the Kansas Experiment Station a number of years ago. In this investigation about 250 samples of soil from 13 counties in the state were analyzed especially for nitrogen and organic matter. In all cases virgin soils were compared with fields of the same kind of soil which had been cropped in various ways for a number of years. It was found that the cultivated soils had lost from approximately 22 to 43 per cent of the original quantity of nitrogen and from about 23 to over 51 per cent of the organic matter originally present. Not only does this great loss probably affect the quality of the Kansas wheat crop, but it greatly reduces the yield for, as pointed out by the Kansas Station from figures published by the Kansas State Board of Agriculture, the crop producing power of Kansas farms as measured by ability to produce wheat has decreased over 17 per cent in 50 years; as measured by the yield of oats 32 per cent; and as measured by the yield of corn by more than 40 per cent. No state or country can suffer such losses as these and continue to enjoy a reputation for the best the earth produces.

NEWS LETTERS

KANSAS CITY

B. S. BROWN - CORRESPONDENT

EXPORT trade in wheat has shown a little improvement at Kansas City the past few weeks, though it is still hampered to a large extent by the shortage of cars which make the delivery of grain at the Gulf ports uncertain. New demand from abroad, naturally, has been of small proportion as most of the foreign buyers have been satisfying their requirements with the cheaper Canadian grain and will doubtless continue to do so as long as navigation is open. The congestion at eastern ports and the difficulty of moving grain in that direction caused some of the demand to be diverted to the Gulf, but the amounts involved were not large. Wheat at Galveston for prompt loading generally has been scarce and premiums for the nearby positions have been firm.

* * *

David L. Croysdale, head of the Croysdale Grain Company since 1914 and for many years a member of the Board of Trade, has sold his interests to Charles F. McCord and David Logan, the latter his nephew. The firm name will be changed to the McCord-Logan Grain Company. The Board of Trade membership held by Mr. Croysdale will be transferred to Mr. McCord. Mr. Croysdale has made no plans for the immediate future.

* * *

The half rates announced recently on shipments of feed to New Mexico from Kansas City territory points, chiefly to aid in relieving conditions in sections where drought has been severe, have been amended to include bran. The reduced rates, some local dealers say, has caused only a small increase in shipments to New Mexico.

* * *

The transportation department of the Kansas City Board of Trade recently issued its first weekly letter, a bulletin designed to keep members more fully informed of happenings of interest in the transportation field. This service will be in addition to the regular circulars dealing with matters which cannot be held for the weekly letter. The new bulletin is an experiment. It will take up, among other matters, the monthly revenue of railroads, figures on car loadings, car shortage, car surplus, location of cars and condition of equipment, in addition to tariff changes and various technical matters.

* * *

A recent report compiled under the direction of President E. W. Evans of the Wichita Board of Commerce showed that about 75,000,000 bushels of wheat is tied up in Kansas bins and elevators because no cars are available in which to ship it. The report included a list of 49 towns in which elevators were full of wheat and which had received no cars for many days. President Evans said he regarded the situation in Kansas as very grave.

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The plant of the Corn Products Refining Company in North Kansas City resumed operations October 26, after having been shut down since last April for additions. It now represents an \$8,000,000 investment and is among the largest commercial plants in this section. The latest additions include an 8-story table house and tanks that raise the storage capacity to 500,000 bushels. When operating at capacity the plant requires 15,000 bushels of corn a day.

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J. J. Kraettli of the E. D. Fisher Commission Company won the Kansas City Board of Trade annual handicap golf tournament, held at the Blue Hills Country Club on Columbus Day. C. F. Aylsworth was second and J. H. Wooldridge was third. Henry Lichtig won a prize for the highest score and E. F. Emmons for the largest number of shots on one hole. Other winners were O. F. Bast, J. G. Goodwin, A. R. Aylsworth, Hayden Jones, Fred Lake, Boone Gregg, P. G. Hale, A. McKenzie and E. E. Kleecan.

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A decided show of strength in the carlot corn market has been one of the features of the trade at Kansas City. The advance which started early in October carried prices up as much as 20 cents in a few cases to the highest level since November, 1920. The rally was the largest since the big decline several years

ago when corn first began to slump from war levels. Choice Yellow sold recently as high as 76 cents and other grades were above 70 cents for several weeks. The small receipts here have met a good demand from feeders and mills over a wide territory in the Southwest, most of the inquiry coming from sections where forage crops have been unusually poor. Many corn dealers think demand for coarse grains will continue good all season as large areas of the Southwest have poor corn yields.

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T. A. O'Sullivan of the Hall-Baker Grain Company has been elected a member of the Kansas City Board of Trade on transfer from Alfred Weston, a flour and feed dealer of Kansas City, Kan. The consideration was \$10,500, including the transfer fee of \$500.

* * *

Members of the Board of Trade recently adopted an amendment giving the directors additional powers in the leasing and buying of property for the exchange. This is regarded as one of the steps toward acquiring a new home for the organization. Several sites for a new building are under consideration by the Building Committee but no report has been made yet. It is generally supposed that a new building will be erected.

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A. J. Izzard of the Kansas City office of Harris, Winthrop & Co. recently made a motor trip to Champaign, Illinois.

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Secretary Wallace of the Department of Agriculture visited the Board of Trade recently and made a short address before the directors asking for their support of the Future Trading Law. It would not meddle with the grain trade or hurt any honest business, he said. It is expected to have about the same effects as the regulations pertaining to the livestock industry, he states. Before addressing the directors he met many of the members on the floor.

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Fred Uhlmann of Chicago, who with his nephew Paul Uhlmann of Kansas City, is organizing the Uhlmann Grain Company, said here recently that their big new elevator was expected to be finished by March 1.

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The reduction in grain rates between certain Colorado points and Omaha, which recently were put into effect by the Burlington, caused many complaints from Kansas City shippers and as a result the old basis was restored.

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Farm prices of corn in Missouri, according to an official bulletin issued the first of the month, ranged from 40 cents in Bates County to 90 cents in Ozark County, with the average 61 cents. In the heavy producing sections prices generally were from 50 to 55 cents. Wheat averaged 97 cents and oats 42 cents.

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Flour production in Kansas City established a new high record the first week in November, 199,000 barrels, representing 89 per cent of the present capacity.

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The shortage of cars in the Southwest continues serious and present indications, according to numerous advices to Kansas City shippers, are that relief will come slowly, probably not until there is a seasonal change in the general shipping activity. Numerous steps toward securing relief have been taken, but, as in other seasons, results are slow in developing. The shortage is always experienced to some extent, but it is more widespread than usual this season, and in most sections has reached its peak a little later than usual.

Practically all parts of Kansas, Oklahoma, Missouri and Nebraska have had an insufficient number of cars for weeks, and country elevators almost without exception are full of wheat awaiting shipment. The recent rally in the market has encouraged farmers to sell but the lack of storage at country points has prevented more than moderate deliveries. Reports have been numerous of wheat stored on the ground and in open bins. Merchants in some localities have been taking in wheat as far as storage facilities would permit. It is generally thought that if cars could have been secured as fast as desired the movement to Kansas City would have been much larger than it was. Incidentally, it is frequently observed that the enforced moderate marketing has been a factor in helping sustain the price.

There has been little accumulation of wheat at Kansas City. Elevator men say there probably will be no big supplies here this season.

Receipts at Kansas City in October were 5,246 cars, about 18 per cent smaller than in the preceding month

and slightly smaller than a year ago. Compared with the 10-year October average, there was an increase of 19 per cent. Corn and oats receipts were under the average.

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The Kansas City Board of Trade filed suit to test the validity of the Future Trading Act at the same time as the Chicago market and other exchanges. The petition was the same as that used at other markets. It covered 24 typewritten pages in which the directors set forth their claims on the invalidity of the act and defended future trading. Henry C. Wallace, Secretary of Agriculture, and C. C. Madison, United States Attorney, were named defendants in the bill. Judge Arba S. Van Valkenburgh of the Federal court granted a temporary restraining order and set November 8 to hear arguments for a temporary injunction.

CINCINNATI

HARRY A. KENNY - CORRESPONDENT

DEVELOPMENTS in the Cincinnati grain and hay market during the past month were not of an outstanding nature. Generally speaking business was good, sales in most instances larger than receipts. A majority of the dealers reported plenty of orders, but no cars available for shipping purposes. The car situation still is an important factor in the trade here. Were it not for the inadequate transportation facilities, business in all probability would be much larger than the trade anticipated for this season of the year. Buyers are willing to place orders and pay a little more for stocks where they are assured of prompt delivery. Sales of grain for the month judging from all reports exceeded those for September and were on a par with those for October, 1921.

A noticeable improvement has swept over the manufactured and millfeed trade, although pasturage is still good in and around this locality to a certain degree. Chicken feeds are very active and the same is true with fall seeds.

All in all the local grain and hay trade is fairing good under existing conditions.

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The Cincinnati Grain & Hay Exchange has renewed its lease for two more years on the Louisville & Nashville Railroad plug track, for \$5,000 a year. The organization at the expiration of the new lease in 1924 will have maintained its own plug tracks for seven consecutive years. The Cincinnati Grain & Hay Exchange is one of the few exchanges in the country that furnishes terminals for its members and the railroads.

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Prediction that it would be some time before carriers would be in a position to provide adequate equipment to meet demands of returning prosperity was made last month by B. J. Drummond, Traffic Manager of the Cincinnati Grain & Hay Exchange, in addressing a meeting of the association. The meeting marked the first gathering of the members in their new headquarters and the last appearance of Mr. Drummond as a traffic manager of the Exchange. He has severed his connection with the organization and embarked into the transportation counselor business for himself in Cincinnati.

Mr. Drummond's analyses of the railroad situation was based on the reports of heavy requisitions made for cars by the railroads of the Western and Northwestern States to handle the movement of the corn crop which is now on, and which will be moving for the next six to eight weeks in steadily increasing volume.

Mr. Drummond said that he was informed by the Car Service Section of the American Railway Association that during the middle of September to the middle of October the average number of cars required for grain loading was 13,225 a week. This is an increase of 4,268 cars a week over the same period in 1920 and 2,579 cars increase over a like period in 1921.

Western lines are calling in all their box cars to handle this movement and the effect is bound to be felt in this section until the end of the year at least, according to Mr. Drummond. "With increased activity in repair work, the number of efficient cars should be somewhat increased during the eight remaining

weeks of this year," said Mr. Drummond. "This will however be largely offset by increased demand for grain loading which under the Interstate Commerce Commission orders is being given preference. If the number of cars in repair is reduced 10 per cent, it would leave 928,374 cars available. The box cars loaded with grain in September and October indicate that a larger percentage of the available box cars are being loaded with grain. With increased grain loading, cars for other kinds of freight will be materially reduced in number.

"With the closing of navigation on the lakes near at hand, more cars of grain will find their way to the South Atlantic and Gulf Ports for export, thus increasing the length of days the average car will have to be under load with grain en route to destination.

"These facts are important to the Cincinnati shipper because they demonstrate the need of caution in making commitments for shipment dependent upon ability to procure equipment. He must utilize every box car to its fullest extent and buyers should be encouraged to anticipate their needs so as to take maximum loads. Shippers should resort to intensive loading and whenever possible double load the equipment. Where commodities shipped in packages are subject to carload minimums of 30,000 to 40,000 pounds two such loads should be placed in a single car. So long as one point of destination is intermediate to the other, carriers will issue bills of lading for each lot. Some carriers will no doubt be willing to do this even where one point is on a branch line and the back haul is not unreasonable."

The Cincinnati Grain & Hay Exchange is now located in its new quarters in the United Bank Building, Third and Walnut streets. The Exchange has leased 3,600 square feet of floor space for two years, with privilege of renewal for three more years. The present quarters of the Exchange were obtained after the directors voted not to accept the proposition of the Chamber of Commerce, with which the Exchange is affiliated to accept space in the Herschede Building, which is to be the temporary quarters of the Chamber of Commerce. While the Grain & Hay Exchange will not be housed under the same roof with the Chamber of Commerce for the next two years at least, the organization will participate in the new building plans for the erection of a building for the Chamber of Commerce. John De Molet, president of the Exchange, said that the committee originally appointed to arrange for quarters in the proposed Chamber of Commerce will continue to function.

D. J. Schuh, executive secretary of the Exchange, said that the grain trade had not severed its affiliation with the Chamber of Commerce by its action in refusing to accept quarters with that organization in the Herschede Building.

"Quarters in the Herschede Building were too cramped for the purpose of the Grain & Hay Exchange," Mr. Schuh said. "The Chamber of Commerce offered us a space of about 38 feet by 75 feet on the second floor of the Herschede Building and our directors after fully considering the matter decided that this space was too small for the business of the Exchange. There is no ill feeling between the Grain & Hay Exchange and the Chamber of Commerce. This is shown by the action of the directors in continuing the committee to negotiate with the Chamber of Commerce for quarters in its proposed building, when it finally decides to build." This committee is composed of Henry M. Brouse, H. Lee Early and Frederick B. Edmonds.

The floor space of the new quarters is more restricted than that which the Exchange occupied in the Union Central Building; but members find that the new quarters are more easily adapted to the uses of the Exchange. The Exchange is located on the ground floor in the southwest corner of the United Bank Building, with the main entrance on Third street. The Third street location serves as the exchange proper and also accommodates the weighing and inspection departments. In the new quarters the Exchange has northern light for its grain inspection department. This is necessary because it is more uniform than light from other directions, and also because it is a Government requirement that all grain must be inspected by this light. Equipment belonging to the Exchange has been brought from storage and has been used in furnishing the new temporary quarters. Much of this equipment was used by the Exchange, when it maintained its own quarters in the Gwynne Building.

Frank Maguire, son of the late Charles Maguire, president of the Maguire & Co., hay and grain dealers, has associated himself with W. L. Brown & Co. with offices in the Gerke Building. Mr. Maguire has not been active in the hay and grain business for several years because of ill health. A few months ago he returned to this city from Ashville, N. C. where he fully regained his health.

Cincinnati has added another grain concern to its already long list. The newest addition is the Atwood Grain Company, which has offices in the Commercial Tribune Building. H. N. Atwood, interested in the Atwood Grain Company, St. Louis, Mo., is directing the business of the local firm. While Mr. Atwood will continue in the Atwood Grain Company of St.

Louis the business of the local company will be conducted by him independently. He has been elected to membership in the Cincinnati Grain & Hay Exchange. Other new members are: George A. Nieman of Nieman & Nieman; C. W. Popp, Cincinnati representative of the Rumsey & Co., Chicago, and Clarence A. Russell, formerly with the Costello Grain Company, which has gone out of business.

Elmer H. Heile, general manager of the Cincinnati Grain & Hay Company, has been elected a member of the Board of Education in Covington, Ky., where he resides. He received the highest number of votes of the five candidates in the race.

Edward Walker, rate clerk in the Traffic Department of the Cincinnati Grain & Hay Exchange resigned last month to accept the position of traffic manager of the Fox Paper Company, Cincinnati. His successor will be appointed by the Traffic Committee.

Clark R. Brown, grain dealer with offices in this city and for many years connected with the Willys-Brown Company of Venice, Ohio, died at his home in Hamilton, Ohio, October 23, following a stroke of paralysis. He was a director of the Citizens Savings Bank & Trust Company of Hamilton and former director of the Butler County Agricultural Society. He is survived by his widow and two sons.

Fire started in a fan and shaft of the Perin, Brouse & Skidmore Milling Company's mill at 14 East Front street last month but was extinguished by employees before the fire apparatus arrived. The fan was used to blow cornmeal dust from the third to the fourth floors. Henry Brouse, treasurer, said that the damage would not exceed \$500.

Harry Niemeyer represented the Cincinnati Grain & Hay Exchange at a meeting called by the Department of Agriculture's Bureau of Economics at Washington, D. C. last month to approve plans for the standardization of hay grades and hay inspections, which now are under the direction of the individual exchanges.

Elliott H. Pendleton, prominent Cincinnati attorney, has been appointed receiver for the Cincinnati assets of the E. W. Wagner & Co., brokers of New York and Chicago, by Judge John W. Peck of the United States District Court here. The assets include more than \$8,000 in notes and stock shares which it is claimed were given through an error to August Ferger, local grain dealer by the New York receiver.



THE grain congestion at Buffalo is causing an unusual situation at the Canadian Head of the Lakes, especially at Port Arthur and Fort William, according to reports at the Buffalo Corn Exchange. It is stated that there is a tremendous rush of all-rail shipments of grain from the Canadian West, both on the Canadian Pacific and the Canadian National Railways, such as never before has been known in the history of these ports on the Canadian shore of Lake Superior. All-rail shipments do not usually commence until December 12 when lake navigation has stopped, but during the early days of November as high as 150 cars a day, representing about 200,000 bushels, have been sent out all-rail for the eastern market. The congestion is doubly bad at Buffalo because the American crop as well as the Canadian grain crop is flowing into the terminal elevators along the waterfront.

Dudley M. Irwin, one of the best known grain merchants in the Buffalo market, has filed a voluntary petition in bankruptcy scheduling liabilities of \$423,779 of which secured claims are \$211,086. Assets listed in the petition total \$288,934 of which real estate is \$12,750 and stocks and bonds, \$255,225, all of which are pledged with banks as collateral. Mr. Irwin had offices in the Chamber of Commerce and was involved in the bankruptcy proceedings of the Steuben Products Company, of which he was an officer and large stockholder. Locke, Babcock, Spratt & Hollister are attorneys for Mr. Irwin. The first meeting of creditors was scheduled to be held in bankruptcy court before Referee James W. Persons at 11 a. m. November 15 at which time a trustee would be elected to liquidate the estate and a date fixed for a sale of the assets which includes property in West Duluth, Minn., and certain mining claims in Ontario.

B. A. Dean & Son, Inc., hay and grain dealers of Auburn, N. Y., has taken over the so-called Cady Elevator at Auburn, which has been operated by the Merchants' Grain Company of New York City, largely as a storage and transfer house for western grain. The wholesale offices of B. A. Dean & Co., have been moved to a structure adjoining the elevator. New machinery is being installed for the cleaning and mixing

of grains. The elevator has a storage capacity of 40,000 bushels. The motor power is electric and the elevator is equipped with grain separators, attrition mill, oat scourer and cracked corn separator. Oat clippers and smutters and a mixing plant for scratch grains is now being installed. Warren H. Dean will continue in general charge of the Auburn business with Alfred C. Wethey as supervisor of many of the loading stations throughout the state. Erwin P. Cady, former manager of the elevator for the Merchants' Grain Company, of New York, also will be retained. Royal B. Dean will be eastern representative of the firm with headquarters in Providence, R. I. Mr. Wethey will be vice-president in charge of the hay department. B. A. Dean, senior member of the firm, is former president of the National Hay Association and has been engaged in the grain and hay trade in Auburn for 35 years. This additional plant together with the new hay grading platforms and warehouses at Auburn will enable the company to more effectively handle its increasing trade in New York State and eastern points.

Construction work has been started on the first unit of what eventually will be the largest flour mill in America. The Pillsbury Flour Mills Company, of Minneapolis has awarded the contract for the mill which it is building in Buffalo to the Fegles Construction Company, of Minneapolis. The A. E. Baxter Engineering Company, of Buffalo is the engineer. The first unit will have a capacity of 7,500 barrels per day and this will be increased by the construction of additional units thus bringing the capacity of the structure up to more than 25,000 barrels per day. The first unit of the mill will be ready for occupancy by September 1, 1923. In connection with the mill there will be a storage house with a capacity for 3,000,000 bushels of grain. All of the grain for the new Pillsbury mill will be handled through the Mutual Elevator and will be delivered to the mill by means of conveyors.

Opening Canadian lake ports to coastwise trade by United States freighters would harm no one except the owners of Canadian vessels, who appear to have been charging excessive rates on grain shipped from Port Arthur and Fort William to Port Colborne or Collingwood. The grain shippers in the Canadian Northwest have discovered that it is cheaper to send their products through Buffalo. This has resulted in serious congestion here and brings a demand from the American Farm Bureau Federation for an embargo on Canadian grain going to Europe through Buffalo. If American freighters were permitted to take on grain cargoes at Port Arthur and Fort William and unload at Port Colborne or Collingwood, there probably would be a drop in rates. A leaven of competition is apparently what is needed. There would, moreover, be clearing of congestion to some extent in Buffalo, and the American grain grower would have lost his basis for grievance. Buffalo might lose a few thousand bushels of grain from the year's total, but that is as nothing compared to the material harm that results from a belief that shipment through Buffalo is certain to result in delay due to the inability of the railroads or the barge canal to forward the shipments to the Atlantic Coast. It would be better to let Canada have a portion of this business which Buffalo cannot at this time handle, either because of the railroad car shortage or the lack of barges on the canal.

The Interstate Commerce Commission will not place an embargo on grain on account of great delay at the receiving ports, especially Buffalo, due to the shortage of cars, according to word received early this month from Washington by elevator and grain interests. Boats that are under charter will report for cargoes. There is little change in the elevator situation at Buffalo. Boats that are on the waiting list are taking considerable delay. A large amount of tonnage is under charter this month, and at the rate grain is being handled at Buffalo, boats will continue to arrive faster than they are worked out. Many times in the last month as many as 20 lake grain carriers were waiting in the harbor for dock space at the elevators and these boats held as much as 9,000,000 bushels afloat in the harbor. Between 400 and 450 cars a day are being made available at the terminal elevators.

The grain rate for prompt loading from the head of Lake Superior to Buffalo with demurrage holds steady at 5 cents, but several advances have been paid without a dispatch guarantee. Several ships of medium size have been placed to load at Fort William for Buffalo at 7 cents and take their turn at the line-up at the Buffalo elevators. For boats up to late November and early December to hold cargoes at Buffalo, shippers are bidding 8 cents, but they are not doing any business. There is some storage capacity on the market at 9 cents. It is figured that close to 100 boats are under charter to hold cargoes at Port Huron and Lake Erie ports and all the inside berths at Buffalo have been taken.

The Franklin Steamship Company of Duluth has brought suit in United States District Court of Buffalo against the owners of the steamer *E. J. Darling* to recover \$8,500, alleged due for demurrage for the detention of the ship carrying a cargo of 371,000 bushels of wheat at the port of Buffalo from October 9 to October 17 at the rate of \$1,000 per day. The plaintiff

claims the boat owners failed to unload the cargo within the required length of time, 72 hours after its arrival in port. This was during the time that the port was clogged with grain owing to the inability of elevators to get cars to move the grain to the Atlantic Seaboard.

John McKay, accountant of the Canadian Government Grain Elevator at Port Colborne, Ont., for the last seven years, died recently in a Toronto hospital after an operation. He was former mayor of the village of Renfrew. He is survived by his widow and five daughters. Mr. McKay was well known in grain and elevator circles along the lower lakes.

The Evans Elevator which recently was taken over by a syndicate represented by Raymond T. Fische of Buffalo, from George E. Pierce, has been opened for the receipt of storage grain. Within a few days after the opening of the elevator, it was clogged with grain like other terminal elevators along the waterfront. The Evans Elevator had been idle for some time. It has a storage capacity of 350,000 bushels.

The Cleveland Cliffs Iron Company, has libeled 37,665 bushels of grain taken off the steamer *Ishpeming*, in connection with its suit started in United States District Court in Buffalo to recover \$8,500 damages which is claimed due through delay in unloading the ship in the Buffalo Harbor. The grain was shipped by the Smith, Murphy Company, Ltd., of Fort William to the order of the Bank of Nova Scotia, care of the Western Elevating Association of Buffalo. It is charged the ship was held in port almost nine days.

Newman Bros. Grain Company, of Rochester, N. Y., is enlarging its feed mill and warehouse by the construction of a two-story addition which will materially increase its production and output.

Officials of the Canadian National Railways and Grand Trunk System, held a conference in Buffalo recently to discuss the grain movement from the Canadian Northwest. Ira W. Gantt, assistant general freight agent, pointed out that elevator congestion at Buffalo and lower lake ports, caused by car shortage, probably will have the effect of delaying movement of grain grown this season in the Canadian Northwest. Plans for moving grain from this region were considered. The belief was expressed that the Canadian railroads will be able to handle the grain which cannot be moved before lake navigation closes.

The Washburn-Crosby Company, of Buffalo has shipped 75 carloads of Buffalo-milled flour bought by the American Red Cross for distribution among Smyrna and Greek refugees at Athens.

The A. E. Baxter Engineering Company, of Buffalo has been awarded the contract for a warehouse to cost \$1,000,000 to be erected for the George Urban Milling Company, of Buffalo.

J. B. Stephens of the Shredded Wheat Company, of Niagara Falls has been chosen by the Freight Traffic Committee of the Niagara Falls Chamber of Commerce to represent that city at a freight traffic hearing in New York City to discuss proposed increase in freight rates on lines east of Buffalo.

The Colman Curtiss Feed Company, has been incorporated under the laws of the State of New York with an authorized capitalization of \$2,500. The directors are Sallie C. Curtiss, Colman Curtiss and Robert E. Palmer. The company will engage in the feed and grain business in Buffalo.



ELEVATOR interests and commission men on this market have been facing a stone wall for some time back in an acute car shortage over the Northwest and the handling congestion at Buffalo and other Lake Erie Ports. That has resulted in a material cutting down of receipts at the elevators from Minnesota and North Dakota points and at the same time operators with contracts for eastern delivery or for export have been in a dilemma to figure out how they were going to be able to come through in view of the blockade at Buffalo. As illustrated conditions in that respect it was mentioned that steamers loaded with grain here have been detained as long as 25 days down there before they were able to unload and get away again. As a result demurrage charges running from \$750 to \$1,000 a day have been demanded by the vessel interests for some time back and that has acted as a deterrent, as handlers are averse to taking long chances in the way of charges. In some cases agents for the vessel companies who contracted space without inserting demurrage clauses in their contracts have been badly stuck through detentions of their steamers, and they are now taking a stiff stand as regards impositions of penalties. As a result of that condition, con-

tracting for boat space has fallen off and the rate for Buffalo delivery from Duluth has declined from 5½ to 4 cents a bushel.

Comparatively few changes in firms or corporations were reported among the houses operating on the Duluth Board of Trade during the last month. The membership of M. R. Devaney was transferred to F. T. Hurley of the Occident Elevator Company and the membership of E. N. Osborne to J. R. McMillan of the Empire Elevator Company. The Hecker Jones Elevator Company and the Equity Grain Exchange were elected to corporate memberships on the Board. The Equity is represented on this market by M. A. Sawter.

During the present fall season the Hallett & Carey Company has shipped out a heavy tonnage of Durum bought for eastern exporters. That office has also specialized in flaxseed in which it has a wide connection. During the period of the war a big trade was put through in handling Canadian grain purchased through its Winnipeg office and shipped away for export.

William D. Jones, manager of the company's Duluth office ranks as one of the most popular grain men on this market. Over 20 years ago he was manager of



WILLIAM D. JONES

the Western Union Telegraph Company's office on the Duluth Board of Trade and during his years of service in that capacity, he had won favor with that office's patrons for the care he gave in the handling his office's business. It was claimed that he never had a "snarl" with any patron by reason of the execution he gave the trades handled from day to day.

His zeal had attracted the attention of operators on this market and in 1902 the company with which he is now engaged offered him his present position which he has held down ever since. The company's Duluth branch has grown with the years so that now a large office force is engaged in handling its details.

Officials of the Minnesota State Inspection Department at Duluth commented upon the continued high grading of wheat and other grains being marketed here so far. The bulk of the wheat and Durum is running No. 3 and better. Deterioration is feared however in later deliveries of wheat owing to large quantities being stacked up in the West on the farmers' premises without proper protection.

One of the most important recent developments on this market was the obtaining by the Duluth Board of an injunction from the United States court against the putting into operation on November 1, of the Capper-Tincher Future Trading Law. In commenting upon the legal actions taken, H. F. Salyards, president of the Board, pointed out that the new Act establishes direct conflict between Federal authority and the rights of the several states in which the exchanges are located. He pointed out that during the negotiations with Congress that preceded the passing of the law the exchanges took the position that they were not opposed to reasonable supervision, provided it was exercised in a manner that would not add to the existing cost of marketing, and would not impair the efficiency of the markets. The agitation for legislation he said, began with attacks upon the future trading system as inimical to producers, consumers and the public interest generally and the hearings impressed the congressional committee with the value of future trading as a part of the general marketing system and the danger that would result from impairment of its efficiency. Mr. Salyards con-

tended also that the Future Trading Act which is being resisted is practically identical, in the requirements it makes of the exchanges, with the one declared invalid. It was held that the regulatory feature could not be upheld as coming within the powers of Congress unless regarded by Congress from the evidence before it, as directly interfering with interstate commerce so as to be an obstruction or burden upon it.

Operators on this market are sanguine that everything will in the end come out all right. They are in the meantime living up to the provisions of the Minnesota Grain Trading Law under which they are keeping records of their individual trades and they being held available for inspection at anytime.

Handling conditions over the Northwest are the most serious in the history of the trade on this market, operators asserted. Capacities of country elevators over Minnesota and North Dakota are so fully taken up that their operators are being compelled to refuse to take in farmers' grain and in consequence advices are being received by houses here to the effect that wheat is being piled up on the ground in many districts with nothing but tarpaulin coverings to protect it from the elements. In that connection M. J. McCabe of McCabe Bros. & Co., reported that 46 of his house's elevators over Minnesota and North Dakota are filled up, making it impossible to accept further deliveries from farmers except as space is made through the loading out of cars from time to time. A case had come under his observation where a large grower had 25,000 bushels of wheat piled up on the ground awaiting the opportunity to ship it in to the elevator.

Along the same line, James Graves, manager of the Capitol Elevator Company mentioned that in the course of a recent trip over North Dakota he saw wheat stacked up at railroad sidings with practically no coverings. Cases came under his notice where farmers waited for a couple of days after bringing their grain in before the elevators were able to take it in. In his opinion serious deterioration must result in the grain that is being held without proper protection at shipping points.

Much of the disinclination that has come about in the grain marketing situation over the Northwest this season has been attributed by dealers here to unwillingness on the part of the trade to finance operators of country elevators, owing to uncertainty regarding conditions that may in the future be imposed through state or Federal legislation and the onerous restrictions at present in effect. An official of one of the elevator companies asserted that had the trade been permitted to operate in a normal way, his company would have increased its string of line elevators, but that with the situation as it is, curtailment had been the rule. As he saw it the grain trade must be accorded the opportunity to operate without vexatious restraints or growers would lose out through further curtailments in their marketing facilities.

R. M. White of the White Grain Company recently commented upon the setting in of an active demand for feeds from over the territory as a result of world's contractors and the lumber companies preparing for lumbering operations upon an extensive scale during the winter months. Eastern demand has been received on this market for oats but only a limited trade has been put through so far owing to the handling congestion done by that way and refusal of the lake package freight steamers to carry any freight unless prompt unloading is guaranteed by shippers.

INDIANAPOLIS

DALE MILLER

CORRESPONDENT

RECEIPTS of corn in this market for October, 1922, were over 1,000,000 bushels, according to the report of Secretary Wm. H. Howard of the Board of Trade, more than for the corresponding month of 1921. In view of this increased receipts the Governing Committee authorized Chief Inspector Samuel Holder to add three additional inspectors to his force.

Chas. B. Riley, secretary of the Indiana Grain Dealers Association, reports that the new Annual Directory of the Indiana Grain Dealers is in the hands of the printers and that it will be ready for mailing to the trade within a few days.

Ed Thompson, of Lamson Bros. & Co., Chicago, Ill., was a visitor at the Indianapolis Board of Trade.

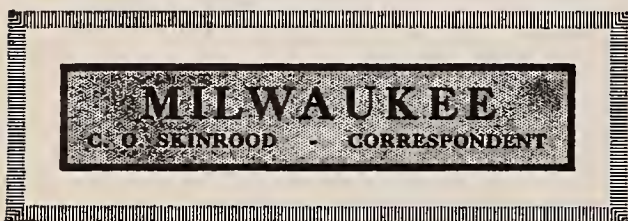
At the regular monthly meeting of the Governing Committee of the Indianapolis Board of Trade, the committee endorsed the "American Education Week" to be held during the week of December 3 to 9 under the auspices of the American Legion.

Joseph T. Gehring, better known to his many friends, as "Uncle Joe," died October 11, at the ripe old age of 80 years. "Uncle Joe" was a veteran of the

Civil War and had been employed by the Cleveland Grain & Milling Company ever since that company was organized some 27 years ago. He at one time was the manager of their Indianapolis office but has been on the retired list for the past 5 years.

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Prominent grain dealers of the country who have been visitors on the Exchange floor during the past month are: E. P. Scherer, Louisville, Ky.; Al Geidel, Pittsburgh, Pa.; J. P. Lindlay and Frank Coe, Chrisman, Ill.; Herman Rothenberger, Frankfort, Ind.; J. W. McCord, Columbus, Ohio; J. A. Harrison and Harry F. Todd, Bloomington, Ill.; C. E. Bryant, Toledo, Ohio.



THERE is some improvement in the receipts of grain as reported by the Milwaukee Chamber of Commerce, but there is the same cry for cars, indicating that the movement would be much larger in case the trade was unhampered by transportation troubles.

The receipts of grain at Milwaukee for the first week in November were given at 752 car loads as compared with 796 cars in the previous week, 319 car loads a year ago and 523 cars for the corresponding week of 1920. The receipts in the past week were made up of 156 cars of barley, 201 cars of corn, 235 cars of oats, 63 cars of wheat, 74 cars of rye, 7 cars of flax and 17 cars of miscellaneous. These figures indicate fairly heavy offerings of oats, corn and barley, and moderate receipts of rye and wheat.

Grain men are a unit in declaring that there is a heavy bulk of grain back in the country and that much of this would be marketed if the conditions were favorable for it. Elevators are reported to be bulging with grain in all directions and farmers are delaying their sales of grain because the country facilities are taken up and in fact elevators are filled all along the line because of the general congestion now prevailing.

* * *

Runkel & Dadum have received the largest carload of barley ever sent to Milwaukee. It came from Romana, S. D., and contained 2,723 bushels and 16 pounds of grain.

* * *

The death of William P. Vollert, a member of the Milwaukee Chamber of Commerce, is reported.

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The Milwaukee Chamber of Commerce was closed for the election holiday in Wisconsin on November 7 and also for the Armistice Day celebration on November 11.

* * *

The great tieup of grain by lack of facilities in the East has caused a general argument in Milwaukee in favor of the new St. Lawrence deep water way route. It is pointed out that the lake freight rate which is usually around 2 cents has been pushed up to 7 cents because every one wants to get the small facilities that are available. The present congestion, costing the farmers many millions of dollars, and tying the grain trade into a hard knot, is declared the last straw showing the imperative need of getting the deep water way route through the St. Lawrence as soon as possible.

* * *

Secretary Harry A. Plumb of the local chamber announces that the Milwaukee exchange will not fight the new Capper-Tincher Law and will not get out any injunction restraining the law from going into effect, notwithstanding that many of the grain exchanges of the country have kept the law from enforcement by injunction. The local Chamber has been designated a contract market under the new law and has received its license from the Department of Agriculture to continue grain futures trading as provided in the new statute.

Mr. Plumb explains however that while Milwaukee grain men will obey the new law fully, they are merely waiting for the court interpretation of the statute and still believe that the law contains some drastic provisions which will seriously disturb the grain trade of the country.

* * *

Shipments of grain for the first week in November were 559,000 bushels of oats in round numbers, 256,000 bushels of corn, 77,000 bushels of barley, 50,000 bushels of wheat and 134,000 bushels of rye approximately. This makes a total for the past week of 1,087,000 bushels compared with 796,000 bushels for the preceding week and 900,000 bushels for the corresponding week a year ago. Shipments are therefore larger than a year ago.

The Chamber of Commerce of Milwaukee is conducting a powerful and intensive campaign to get the Interstate Commerce Commission to declare an embargo on shipments of Canada through the United States to eastern ports for movement abroad. The latest move in this campaign is to send 3,000 letters to the country grain shippers of the four states—Wisconsin, Iowa,

Minnesota and South Dakota, also to senators, representatives in Congress and governors of these same states. The appeal is that shippers exercise all the influence at their command, by appeals to officials and otherwise to work for the embargo.

The Chamber of Commerce is not going to rest with the appeal to the Interstate Commerce Commission, but will also intercede with the Department of Agriculture at Washington on the plea that the farmers of the Northwest are losing millions of dollars by the present monopoly of Canadian grain shippers of the facilities of the United States. If the Department of Agriculture will not act, the plea will be brought before President Harding himself.

The letter above mentioned says in part:

Canada is so situated geographically that the Canadian shippers are in a position to pay vessel rates that are prohibitive to the shippers of the United States with the result that lake carriers are transporting Canadian grain to the exclusion of the United States grain.

The Milwaukee Chamber of Commerce has protested vigorously to the Interstate Commerce Commission against this gross injustice to producers in the United States, because if these tremendous shipments of Canadian grain were immediately shut off, thus making these facilities available for the exclusive use of the producers of the United States grain, a great relief would be afforded to the United States railroads and both western and eastern lines could then devote their facilities to the handling of grain produced in the United States.

The Interstate Commerce Commission's reply to this protest indicates that the congestion at Buffalo will be relieved by the furnishing of additional cars at Buffalo for the movement to the seaboard. It is practically a physical impossibility to furnish enough equipment and to expeditiously handle the loads to accommodate the tremendous grain traffic that could flow through Buffalo. Therefore, if the Commission furnishes additional cars at Buffalo, those cars will principally be used to transport Canadian grain and relieving Buffalo of this amount of grain simply means that Canadian grain will go down the Lakes to the exclusion of the United States grain.

This is a fight in which the producers of grain in the territory indicated above are most vitally interested as well as all of those who in any way are connected with the handling of the surplus. There are powerful interests which have vigorously opposed any effort to have an embargo or restriction of any kind placed on the handling of Canadian grain through United States ports. Most of the big grain exporters handle Canadian grain extensively; vessel owners are undoubtedly getting very much higher rates while the Canadian movement is on than would be the case if restrictions were placed on forwarding through United States ports.

This problem of getting embargo on the Canadian movement is one of the most aggressive campaigns waged here by Harry A. Plumb, secretary and H. H. Peterson, president as well as J. L. Bowlus, manager of the transportation department of the Chamber of Commerce and with the co-operation of the entire membership.

The Milwaukee Chamber of Commerce is seeking the help of all the grain interests in the Northwest to put this proposition over. It is hoped that if the embargo fails to be laid, that other remedies will be applied since it is an outrage, Milwaukee grain men say, that the United States marketing facilities should be used for the benefit of Canada and not for our own American shippers.

* * *

The first cars of new corn have appeared on the Milwaukee market grading No. 1 and No. 3 Yellow and testing 12 per cent and 16.6 per cent of moisture and weighing 56½ and 52½ lbs., respectively. They were shipped from the northern part of Illinois.

* * *

The grain in store at Milwaukee as given according to early November figures showed 110,000 bushels of wheat in round numbers, 270,000 bushels of corn approximately, 424,000 bushels of oats, 192,000 bushels of barley and 41,000 bushels of rye. Stocks of many grains are abundant for this season of the year.

* * *

The flour mills of Wisconsin are running far below their normal capacity due to the continuation of the bad car shortage, according to L. Horton, Appleton, Wis., secretary of the Wisconsin State Millers Association which held a special meeting recently at the Hotel Pfister in Milwaukee.

"Elevators at most transportation centers are overflowing with grain," said Mr. Horton. "The crop of grains was large this year but after the crop reaches the elevators, it remains there as there are no cars to move it. The shortage is largely occasioned by the fact that so much of the rolling stock was sent to the coal regions to make up the big shortage. It is not likely that the mills will reach near capacity until this shortage is relieved.

"There is still little demand for rye flour in this country. The public seems to think that the price is too high and buyers will not purchase until it is reduced. However, the demand for wheat flour is so strong that it is almost impossible to supply the enormous demand.

"France will make heavy inroads on the American corn market this year. The French Government has ordered the use of substitutes for wheat flour, due to the scarcity of that commodity. Corn, which is the chief substitute, is largely obtained in the United States. This insures a good demand from French sources for American corn this year."

* * *

Milwaukee flour mills in the past week have made 7,000 barrels of wheat flour, compared with 10,200 barrels in the previous week and 16,800 barrels for the corresponding week a year ago. The output of rye

flour for the past week was 2,500 barrels, compared with 2,400 barrels in the previous week and 1,800 barrels for the corresponding week a year ago. The output of rye flour is about 50 per cent of the ratio of last year.

* * *

The November rate of interest has been determined by the Finance Committee of the Chamber of Commerce at Milwaukee at 6 per cent, the same as the rate fixed for last month.

* * *

Every boat load of grain which could be carried by water to Europe would release 400 freight cars for other traffic, according to A. C. Uecke, secretary of the Milwaukee Traffic Club who addressed a meeting of the club at the Hotel Pfister. He urged the St. Lawrence deep waterway which once for all would take care of the great grain congestion in making shipments to Europe and he urged an embargo on the shipments of Canadian grain to the seaboard through the United States.

* * *

W. Osborne Goodrich, Jr., son of the manufacturer of linseed oil by the same name, has been elected to membership in the Milwaukee Chamber of Commerce.

* * *

Milwaukee stocks of flour according to the compilations made at the opening of November are 53,000 barrels in round numbers, compared with 123,000 barrels a month ago, and 46,000 barrels for the corresponding date a year ago. In a single month the flour stocks have been cut in half, but the supply is still up to the normal of the past several years.

* * *

The latest report compiled on grain prices being paid at Milwaukee shows that No. 3 barley is selling at 65 to 68 cents a bushel as compared with a price of 59 to 60 cents a bushel for the corresponding time a year ago. The present market is 8 cents or between 10 and 15 per cent higher than last year. No. 3 White oats is quoted at 43 to 44 cents a bushel as compared with a ruling price of 30 to 34 cents for the same grade a year ago. Oats is actually 10 cents a bushel higher than last year. This represents a gain of about 30 per cent. No. 2 rye has been quoted recently at Milwaukee at 85 cents a bushel as compared with 74 to 75 cents for the corresponding time a year ago. Rye has therefore advanced about 10 cents a bushel, or 10 to 15 per cent above last year.

No. 2 Yellow corn has been quoted recently at Milwaukee at 71 cents a bushel as compared with 47 cents being paid for the same grade a year ago. Corn has therefore actually advanced no less than 24 cents a bushel, or almost 50 per cent over the prices paid in 1921. No. 1 Northern wheat has been ruling at Milwaukee at \$1.28 to \$1.33 as compared with \$1.27 to \$1.32 paid for the corresponding time a year ago. Wheat prices are therefore practically the same as a year ago.

This record reveals a startling rise of about 50 per cent in corn, a gain in oats since 1921 of about 30 per cent and rye and barley have advanced between 10 and 15 per cent in the same period.

* * *

The farmers of Fond du Lac County and other parts of Wisconsin are up in arms against the high prices of mill feeds which have advanced very materially in the past few weeks. The farmers of Fond du Lac County say that the steady increase in the price of mill feeds is arbitrary and unwarranted and they are seeking a way out by buying and feeding substitutes to keep up the flow of milk.

R. R. Runke, the county agent of Fond du Lac County, says that the protein content in choice Alfalfa is as high as that of bran and an Alfalfa mixture has been devised which is now being used by many farmers who are trying to keep away from bran as long as the prices are so high.

Feed dealers of Milwaukee assert that the demand for bran and other mill feeds in Wisconsin is very light, in fact, it is not nearly up to the normal for this season of the year. They blame the small buying to the excessive prices now prevailing, to the fact that farmers are short of cash and have little money to buy feeds and they also say that the farmers who are able to buy feeds do not think it pays to feed bran at the present high price of bran and the relatively low prices for milk.

* * *

Hay dealers report that receipts in the past week have been just enough to supply the trade, with prices at the old levels. Real high grade Timothy is in keen demand and will bring top prices. There is little inquiry for Light Clover Mixed. Low grade prices of hay are weak and Alfalfa is in keen demand, especially the choice grades. Timothy hay is selling from \$15.50 to \$17.50. Mixed hay from \$13 to \$15.50 and sample hay at \$9 to \$10.

* * *

Jackson Brothers & Co. of Chicago have opened an office in Milwaukee with William Young, Jr., in charge. Mr. Young has been the representative of Lamson Bros. & Co.

* * *

Milwaukee will hold the largest fleet of steamers put up for the winter on record for this city, according to Herman Bleyer, the secretary of the Harbor Commission. It is estimated that between 40 and 50 large steamers will be held over here, many applications

having already been received. The lack of dry dock facilities has made Milwaukee an unpopular wintering place, but now many of the ships will end the season here while in the coal trade. This will mean that many additional ships will be kept here for the winter. Many ships will also be used for storage during the winter, especially for grain.

The large buildings of the American Malt & Grain Company in Milwaukee are being razed. The old elevators are being torn down and millions of feet of lumber will be salvaged. Large barley tanks, 48 feet in diameter, will be moved whole to Chicago if possible. If not they will be torn into sections. These tanks weigh 110 tons each, making an engineering problem of large proportions.

More than 1,100 saloons in Milwaukee will be barred by prohibition officials from using this title in the Milwaukee telephone book. There will be no saloon department in future directories. It is expected that they will be listed as soft drink parlors, or by some similar term as there are no saloons now in a legal sense. This is part of the tightening up process in the administration of all liquor laws.

The latest crop reports of Wisconsin show that the state has matured four large corn crops in succession without injury from frost. The 1922 corn crop of Wisconsin is estimated in excess of 93,000,000 bushels, a gain of about 3,000,000 bushels for the month and a figure which is close to the high record crop of the state of 97,000,000 bushels. The yield of 1922 is also 24,000,000 bushels above the five-year average.

The oats crop of Wisconsin for the past year was also large with a yield over 150,000,000 bushels compared with 63,000,000 bushels produced last year and a five-year average of 95,000,000 bushels. The present crop is thus 10,000,000 bushels above the average. The yield in 1922 is over 41 bushels to the acre compared with 24 bushels last year and a 10-year average of 33 bushels an acre. The yield is almost twice as large as a year ago.

The barley yield of Wisconsin for 1922 is also high with a yield of 32 bushels an acre, compared with 22 bushels last year and a 10-year average of 29 bushels. The total yield is almost 15,000,000 bushels, compared with 10,000,000 bushels last year. The five year average, however, is above 18,000,000 bushels, due to the fact that this figure was obtained before the days of prohibition largely, when barley production was at the maximum.

The 1922 Spring wheat yield in Wisconsin was over 16 bushels an acre, compared with 11 bushels in 1921. Total wheat yield is 3,300,000 bushels compared with a five-year average of 6,300,000 bushels. The raising of wheat was popular during the war but the area devoted to it has steadily declined since.

The latest crop report shows that fall sown grains are greatly in need of rains. Otherwise, the fall is favorable for harvesting of the various late crops.

ST. LOUIS

S. F. LARRIMORE CORRESPONDENT

GIVING figures to prove that the farmer is in a better financial position this year than last, N. L. Moffitt, president of the Moffitt-Napier Grain Company, took issue with statements made a short time ago at a meeting in Chicago at which a number of big business men discussed the "deplorable condition" of the American farmer which threatens to reduce him to a "condition of serfdom." The money value of the grain and cotton crops is over \$1,000,000,000 more than last year, according to Mr. Moffitt, who claims that those crops are not one-half of the production of the farms and that all commodities are selling higher than a year ago, to the benefit of the farmer. While Mr. Moffitt pointed out that the yield of the major grains was about the same this year as last, he calls attention to the fact that the money value is much higher and that there was a difference in value for the grains this year of over \$640,000,000. In addition to grains, cotton and all other farm products are bringing much better prices this year than last and it is safe to say that there is easily over \$1,000,000,000 more money this year in the hands of the farmer than last year.

Steps are being taken to rebuild the Frank Reser flour mill at Urbana, Mo., which was recently destroyed by fire. About \$10,000 worth of grain was destroyed with the mill.

The Cowgill & Hill grain elevator at Carthage, Mo., was destroyed by fire recently with a loss of about \$150,000. Over 100,000 bushels of wheat were in the elevator.

There were 1,002,099 bushels of wheat; 70,079 bushels of corn; 95,255 bushels of oats, and 6,792 bushels of rye in public elevators at St. Louis on October 31 and 187,689 bushels of wheat; 16,197 bushels of corn and

1,881 bushels of oats in private elevators at the same time. Stocks of flour were as follows: November 1, 1922, 52,200 barrels; October 1, 1922, 56,300 barrels, and November 1, 1921, 76,400 barrels.

Arnold A. Thurnau, of the Arnold A. Thurnau Grain & Feed Company, was married recently to Miss Ellen Bernice Phelps. He was enthusiastically congratulated by the members of the Exchange, where he is very well known on the floor.

The North Missouri District Corn Show Association has been formed at Chillicothe, Mo., and will hold its first annual corn show in Chillicothe November 22 and 23. Farmers from that entire section of the state are being invited to make entries in the show.

The following recently made application for membership in the St. Louis Merchants' Exchange: George Batz, of the Graham & Martin Grain Company, to be transferred from Wm. Lothman; Elmer L. Fisher, to be transferred from Milton E. Veninga; Alfred W. Izatt, of the Elmore-Schultz Grain Company, from Edward C. Becker, and George A. Chapman, of the American Hominy Company, Indianapolis, Ind., to be transferred from C. M. Rich.

The following were visitors on the floor of the St. Louis Merchants' Exchange recently: E. H. H. Cunningham, president of the United States Grain Growers, Cresca, Iowa; W. H. Crowthers, Golden City, Mo., and Jack Boland, Webster Groves, Mo., directors in the organization.

The likeness herewith is that of John Daniel Mullally, a prominent hay merchant on the St. Louis Exchange. He was born in St. Louis on September 8, 1873, a son of



JOHN D. MULLALLY

Daniel Mullally, a pioneer in the St. Louis hay and grain trade. His education was completed at the St. Louis University. At the age of 17 he began his business career with the John Mullally Commission Company, one of the prominent hay and grain commission firms of that time. He traveled extensively for them in Missouri, Kansas, Illinois, Iowa and Oklahoma, later selling hay and grain for them on the St. Louis Merchants' Exchange. He later accepted a position with the Ballard-Messmore Grain Company, as salesman of hay and coarse grains. For a short period he represented several Chicago hay commission firms on the St. Louis market, and then took charge of the hay department of G. L. Graham & Co., which firm was later merged into the Graham & Martin Grain Company, with whom he is still connected as manager of the hay department. Much of the material used in the formation of the St. Louis hay letter each month in this paper is secured from Mr. Mullally.

Mr. Mullally is long and favorably known to the hay trade in most of the hay raising states in the Union. At one period or another he has received and handled hay from as far as Maine, Canada, Texas and Nevada. He has established a reputation as a large handler of Alfalfa hay, in season handling large quantities of this product from Colorado, Nebraska, Idaho, Kansas and Oklahoma. He has held a membership in the St. Louis Merchants' Exchange since he was 21 years of age and has been prominent and active in Merchants' Exchange affairs for many years, serving on the Board of Managers of the Transportation Department. He is also a member of the Hay Committee, for which he has been acting as secretary.

Mr. Mullally is a man of good physique and enjoys excellent health. He has three children. The oldest Joseph W., is a Junior Lieutenant in the U. S. Navy and is now stationed at the U. S. Naval Radio Station, Cavite, P. I. His second child, a daughter, is living with him and his youngest son, John N., is in the real estate business in St. Louis. By close, personal attention to his shippers' interests, Mr. Mullally has built up a large and profitable hay receiving business. While he has been

more prominent in the hay business, he is very well and favorably known to the grain trade in the handling of cash grains, and is recognized as one of the best posted men in the St. Louis market.

Loss estimated at \$25,000 resulted from a fire which recently destroyed the farmers' grain elevator at Salisbury, Mo.; 15,000 bushels of wheat and a carload of flour and feed were in the elevator. Neither the cause nor the point of origin of the fire is known, as the entire elevator was in flames when the fire was discovered.

The following were among the recent visitors on the St. Louis Merchants' Exchange: H. L. Dahlman, Nashville, Tenn.; J. P. Eckert, Chicago, Ill.; Geo. R. Hutson, Charleston, Mo.; L. W. Burton, Ridgely, Tenn.; C. M. Moore, Tupelo, Miss.; S. J. Cowan, Ft. Worth, Texas; W. D. Moon, Memphis, Tenn.; P. P. Williams, Vicksburg, Miss.; John Clement, Waco, Texas; W. H. Wharton, Nashville, Tenn.; T. L. Brown, Louisville, Ky.; A. Hasson, Chicago; and J. A. Holland, Baton Rouge, La.

Amedee B. Cole, formerly in the grain business in St. Louis and for many years a member of the St. Louis Exchange, died at his home here recently. He went into the grain commission business with his father, and was married in 1879 to Miss Annie Jackson, daughter of John Jackson, then a leading banker. After being in the grain business for 25 years, Mr. Cole withdrew from that business in 1899 and undertook the management of the mining interests of his father-in-law. Mr. Cole was a member of the Merchant's Exchange for 44 years and at one time was its vice-president. He was very well known among grain men over the country.

The first arrival in St. Louis of the Mississippi-Warrior Service barges for about a month was recorded October 23. The extreme low water which has handicapped navigation is due to the driest summer and early fall that the valley has experienced in 51 years.

The grain elevator and warehouse of P. W. Harsh & Co., just south of the Municipal Bridge at St. Louis on the Illinois side, and 16 cars belonging to the Southern Railroad Company, were destroyed by fire recently with a loss of nearly \$45,000. There were 8,000 bushels of grain in the elevator and 6,000 in the cars. The loss was covered to the extent of \$13,000 for P. W. Harsh & Co., and \$15,000 for the railroad company.

PHILADELPHIA

T. A. SIEBER CORRESPONDENT

ACCORDING to the monthly report of the statistician of the Commercial Exchange the stock of grain in public warehouses in Philadelphia on November 1 was: 2,060,127 bushels wheat, 316,607 bushels corn and 257,017 bushels oats, compared with 1,622,713 bushels wheat, 30,869 bushels corn and 115,712 bushels oats on October 2, and 2,489,946 bushels wheat, 252,358 bushels corn and 227,358 bushels oats on November 1, 1921. Receipts of grain at Philadelphia during the month of October, 1922 were: 4,919,302 bushels wheat, 1,472,275 bushels corn, 771,371 bushels oats, 106,188 bushels rye and 1,391 bushels barley. Exports from this port during the month of October, 1922, were: 3,391,569 bushels wheat, 1,025,890 bushels corn, 360,000 bushels oats and 160,278 bushels rye.

William McClenahan of Center Hall, Pa., has purchased the plant of the Foreman Grain Company at that place for \$4,500.

S. Antonion, grain importer of London, England, is touring this country and recently visited merchants on 'Change.

C. M. Syder, vice president of the Hudson Shipping Company, Inc., in the Bourse, recently left for an extended business trip throughout Europe.

The Port of Philadelphia Ocean Traffic Bureau have applied to the Court of Common Pleas No. 5, Philadelphia, for a charter.

Lawrence Fisher, seed merchant of Akron, Ohio, recently paid a visit to the trade on 'Change floor.

J. W. McCulloch, secretary of the Barlett Frazier Co., of Chicago, visited the eastern office in this city a few days ago as well as merchants on 'Change.

Hundreds of thousands of dollars was lost by Pennsylvania wheat growers last year through the ravages of the moth, but the loss will be heavier this year, according to agents of the State Department of Agriculture. The agents have found that more than 60 per cent of the Pennsylvania wheat being shipped into Philadelphia and other ports on the Atlantic Seaboard is affected by the moth. About

180,000 bushels of wheat grown in this state as well as Maryland and Delaware was found to be unfit for human consumption at a large grain elevator in Baltimore.

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S. J. McCaull, secretary of McCaull-Dinsmore Company, commission merchants of Minneapolis, Minn., was a recent visitor at the Commercial Exchange.

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George G. Omerly, head of the Hancock Grain Company in the Bourse, has closed his summer residence at Atlantic City, N. J., and returned with his family to his city home.

* * *

S. Townsend Zook, secretary of the Merchants Warehouse Company, and president of the Ezl. Dunwoody Company, grain merchants, has returned with his family to this city after residing at his summer cottage at Ocean City, N. J.

* * *

William B. Scattergood of the grain and feed firm of S. F. Scattergood & Co., Bourse Building, has returned from an extensive business trip through Pennsylvania, Maryland and New Jersey. He says the trip was very successful.

* * *

The Pennsylvania Railroad Company has placed an embargo, effective at once, on wheat consigned, re-consigned or intended for delivery at the Keystone Elevator, North Philadelphia, when originating in Pennsylvania, Maryland, Delaware or New Jersey.

* * *

Notice was recently posted by the Philadelphia Grain Elevator Company that on and after November 2, 1922, and until further notice, no wheat ex. boat will be unloaded at the Port Richmond Elevator.

* * *

A large machine operating along the Delaware Bay shore at Bowers, Del., is baling salt hay, which is bringing \$24 a ton and is used for packing purposes.

* * *

The number of cars unloaded during the month of October, 1922, at the Girard Point Elevator was: 2,658 wheat, 235 corn, 170 oats and 32 rye; at the Port Richmond Elevator: 340 wheat, 594 corn, 27 oats and 1 rye; at the Twentieth Street Elevator: 1 wheat, 12 corn, 69 oats, 3 rye, 1 barley, 2 buckwheat and 1 peas.

* * *

There will not be a shortage of buckwheat this fall in Columbia County, Pa., according to the farm bureau. This county is considered the leader for buckwheat and it is better than it has been for several years, and mills have been working 24 hours a day for some time past.

* * *

The Interstate Commerce Commission has ordered eastern railroads to deliver more cars to western roads. The Pennsylvania System has been ordered to deliver 1,000 cars to the Burlington, which in turn will distribute them to the Great Northern and Northern Pacific.

* * *

The first lot of new corn from this season's crop arrived in this market about two weeks ago. It consisted of 350 bags and was consigned to Wm. P. Brazer & Sons from Delaware. The inspectors of the Commercial Exchange graded it No. 5 Yellow and the consignee received 87 cents on the dock.

* * *

The Western Union Telegraph Company announces the resumption of the cable letter and week-end letter services to Great Britain and Ireland, which were suspended during the war; this will be welcomed by the merchants on 'Change.

* * *

It is declared by the farmers in the vicinity of Bloomsburg, Pa. that the recent drought has been beneficial to them instead of doing great damage as was at first feared, the benefit coming through the necessary delay in the sowing of wheat, as fields sowed early are badly infested with the Hessian fly and will be almost a total loss.

* * *

Labor condition on Franklin County (Pa.) farms are almost the same as during the war times, according to Farm Agent Knode. With the opening of industries on a larger scale and the business revival, farmers find themselves unable to compete in the wage markets for labor. Low prices of farm products tend to make this situation more acute.

* * *

A meeting of the joint executive committee on the improvement of the harbor and of the Delaware and Schuylkill Rivers was held a few days ago in the Bourse Building and the following officers were elected: J. S. W. Holton, chairman; Emil P. Albrecht, vice chairman; William R. Tucker, secretary. A minute on the recent death of Coleman Sellers, Jr., of the Board of Commissioners of Navigation, was also adopted.

* * *

Joseph E. Haasz, veteran gate-keeper of the Commercial Exchange, died suddenly October 26. He was 83 years old and death was due to a stroke of apoplexy. He held the position at the gate for the past 26 years and was known to the flour and milling industry as well as the grain trade throughout the United States. He was on his way home and was stricken at the top of the Bourse steps and fell in a heap on

the first landing. He was taken to the Jefferson Hospital where he passed away shortly afterwards. He is survived by his widow, two sons and a daughter.

John Lynch has been appointed gate-keeper on the floor of the Commercial Exchange which was made vacant by the death of Joseph E. Haasz. He is known among the trade as "John" and he recently passed his 72nd birthday. When he was 22 years old he was the city salesman for L. Knowles & Co., flour merchants, and while there employed sold the first barrel of "Pillsbury's Best" flour in this city. He later formed the firm of John Lynch & Brother and conducted this business until November last. He has been a member of the Commercial Exchange for the past 40 years and served as a director and a committeeman.

* * *

T. W. Dockett Smith, development agent of Cardiff, Wales, has advised the Bourse that his city is anxious to develop a direct import trade with the United States. This city is the market place for a population of over 2,000,000 people within 30 miles, and over 10,000,000 within a 90-mile radius. The huge population is engaged almost entirely in industrial pursuits and relies very largely for its supplies upon imported foodstuffs.

* * *

About \$50,000 will be needed, according to Dr. J. G. Sanders of the Pennsylvania Department of Agriculture, to make a fight worth while against the Japanese beetle next year in this state. At a conference held in Washington recently it was decided to extend the quarantine area. State authorities will recommend to the next legislature an appropriation of \$50,000 to carry on the work.

* * *

It has been decided by the Directors of the Philadelphia Bourse that they take no action relative to making collection of checks at par compulsory; the request for action on this question was made by the United States Chamber of Commerce at Washington. The directors were of the opinion that approval would lead to compulsory legislation, which they believe would interfere with personal rights. The Commercial Exchange and the Chamber of Commerce of Philadelphia took a vote on the subject and collections at par were indorsed.

* * *

William R. Cornell, aged 73 years, died from apoplexy on October 24. He was a member of the firm of Cornell & Bro., grain, feed and hay merchants of this city, and a member of the Commercial Exchange for 39 years. He was conducting some business on 'Change Tuesday and he died that evening about eight o'clock. He was a member of Fernwood Lodge No. 543, F. & A. M. His widow survives him.

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The Philadelphia Commercial Museum have received the following communications, answers to which should be made by number:

40249 Guantanamo, Cuba. "If you wish an opportunity to recommend me to some houses, I shall be very much obliged to you. I shall also be very grateful if you will send me a list of firms interested in wheat flour and in general all kinds of foodstuffs." Correspondence in Spanish.

40250 Kingston, Jamaica, British West Indies: "Advise they are anxious to get in touch with flour concerns." Correspondence in English.

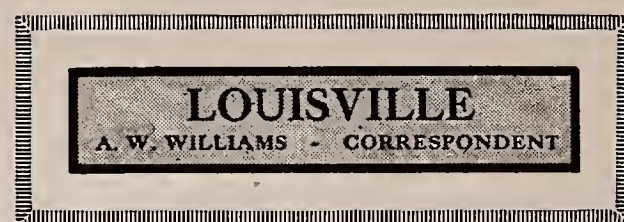
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According to the statistician of the Bureau of Agricultural Economics of the United States Department of Agriculture, it is estimated that only 53 per cent of the usual amount of fall plowing had been done by November 1 in Pennsylvania, due to the extremely dry weather. The preliminary estimate of the average yield per acre of corn in Pennsylvania this year is 45 bushels and the production 71,505,000 bushels as compared with 76,272,000 bushels last year and 63,707,000 bushels, the average production for the past ten years. The percentage of this year's crop which is of merchantable quality is estimated at 84 per cent as compared with 90 per cent last year and 81 per cent, the average quality for the past 10 years. The stock of old corn on farms November 1 was estimated at 5 per cent of last year's production as compared with 6 per cent in 1921 and 3.5 per cent, the average stock on hand for the past 10 years on November 1. It is estimated that 78 per cent of the total corn crop this season will be husked as grain, 20 per cent going into silos and 2 per cent for forage and grazing.

The average yield per acre this season for buckwheat is estimated at 20 bushels, and the production 4,640,000 bushels as compared with 5,175,000 bushels last year and 5,310,000 bushels, the average production for the past 10 years. The quality of this season's crop was about 92 per cent of a normal as compared with 95 per cent last year and 91 per cent, the average quality for the past 10 years.

The average yield of Clover seed this season is estimated at 1.4 bushels per acre and the total production 32,000 bushels as compared with 25,000 bushels last year and 29,000 bushels, the average production for the past three years.

The average weight per measured bushel of grain this season, their weight last year and the average weight for the past 10 years are as follows: Winter wheat: 59, 59, 59.6; Spring wheat: 58, 57, 58; Oats: 31.5; 30, 31.8; Barley: 47, 47, 47.3; pounds.



THE general situation here is looking much better. The elevators report better daily handlings, and are carrying a fair amount of grain on storage. A good deal of wheat is being carried on long storage, as millers and wheat men are a bit bullish in their opinions concerning wheat and are holding it for spring use, and buying to cover current requirements. It is said that some of the mills are not only carrying their own storage well filled up, but carrying wheat in outside storage, as it is felt that when Europe really starts buying surplus wheat will be reduced quite rapidly in this country. New corn is looking very good in quality, but a bit high in moisture.

The Kentucky Public Elevator Company, reports that it has about 465,000 bushels of grain in storage, divided about 425,000 wheat, of which about 400,000 bushels is long storage; the balance being composed of 14,000 bushels of old corn; 22,000 bushels of oats, and 3,000 bushels of rye. Daily handlings are around six to ten cars in-bound and also out-bound. Business as a whole has been very fair on the latter part of the summer and during the fall, and the general outlook was pronounced as very favorable.

Better railroad facilities for shippers are promised by the Louisville & Nashville R.R., which in 1922 has contracted nearly \$30,000,000 in improvements to road, equipment, etc., and plans to spend \$52,000,000 within the 1922-1923 period. The road has just placed orders for 3,000 additional freight cars, including 1,000 box cars. The Illinois Central Railroad, has just announced purchase of 3,000 cars, and 65 locomotives. The Monon Railroad has announced purchase of about \$750,000 in new engines and equipment. The C. & O. Railroad also announced big purchases of equipment recently. All of these roads enter Louisville, and their improvements should aid somewhat in future car supply.

* * *

Farmers are getting considerable relief from the Federal and private farm loan banks, and as a whole the farmers are in much better shape than for some time. The South is prosperous and is buying livestock more freely for breeding purposes, and is planning to buy freely of implements for spring use, as the jobbers and retailers are already placing orders and factories are busy. Wagon trade is also active, and it looks as if there will be better feed and grain demand from the South this season than for some time past.

* * *

The first elevator building of any importance in Louisville in the past four or five years was announced on November 8, when the Gold Proof Milling Company, announced a permit filed with the City Building Inspector for an elevator, the permit calling for an outlay of \$50,000. However, the permit doesn't cover the actual cost, in view of the fact that the company has arranged to install 14 concrete tanks, of 90x16 feet, which with interstice storage will give it tank storage of about 200,000 bushels. The present small elevator house has a capacity of 80,000 bushels, which will give the company 280,000 bushel capacity. This company is controlled by the grain house of S. Zorn & Co.

* * *

The first new corn of the season came into Louisville at the Kentucky Public Elevator on November 7. It was reported that this corn ran 18 to 19 per cent moisture, and had to be dried down to 14 per cent. Quality was fine other than the high moisture content, which is due to warm weather, there having been very little wind or weather of a character to drive out moisture. Reports received from other houses on early corn show that it is of good quality, some reports showing tests of 16 to 17 per cent moisture content.

* * *

It is noticed here that in-bound cars coming from the North are being loaded fairly heavy, one car of 113,000 bushels having been received the past week, whereas shipments out, especially moving South, are being loaded principally at around 84,000 to 88,000, it being seldom that a big car is loaded at 100,000 or 110,000 bushels. This condition results in a little balance between in-bound and out-bound shipments, resulting in out-bound shipments in cars accounting for more cars than in-bound, except for stop over.

* * *

Frank N. Hartwell, president of Verhoeff & Co.'s local grain dealers and former elevator owners, recently talked before the Louisville Transportation Club, telling the members of his observations while spending five months in Europe and parts of Asia, he having returned just a few weeks ago after spending the entire summer on the other side.

* * *

Movement of hay in-bound has been very light as a whole, due to car shortage at rural points. Locally there are so many cars emptied that there is not much trouble at any time over getting cars to load, and ele-

vator companies load out their in-bound cars to a considerable extent. Demand for hay is fair and sales would be larger if supplies were better. No. 1 Timothy is quoted by jobbers at \$19 a ton and No. 2, \$17.50; No. 1 Clover, \$17.50 and No. 2, \$15; Mixed Light, \$18.50; No. 1 Mixed, \$17; No. 2, \$16; Wheat and Oat Straw, \$10; Rye Straw, \$12.

Feeds are in good demand, both manufactured and mill, and with the grass long ago browned by frost, and corn high, the feed demand looks good. Bran is quoted at \$29 with middlings and mixed feed at \$31 @ \$32 a ton, including sacks. Hominy feed is \$33.50, and cracked corn, \$33.

Corn and oats have been in very fair movement and demand. Local jobbers are asking 78½ cents for No. 2 grades and 78 cents for No. 3 grade in old corn, while new corn is 1½ to 2 cents lower on each grade. Indications are that the houses which have corn driers will be quite busy in the drying departments for the time being. Oats are quoted at 48 cents for No. 3 and 48½ cents for No. 2. Local mills are paying around \$1.30 for wheat delivered here. Rye is quoted at around 90 cents.

* * *

The Dunlop Milling Company, of Clarksville, is one of several concerns of that city which will receive return of overcharges on coal freights, from the Louisville & Nashville R. R., under decision of the Interstate Commerce Commission, on October 25, this company being one of several which filed complaint on overcharges from June 25, 1918, to March 1, 1920.

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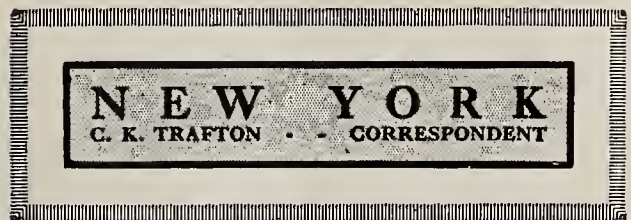
Evansville reported that incendiarism was suspected in the fire which caused \$15,000 loss for the Independent Hay & Grain Company, and threatened destruction of several factories. A night watchman had previously driven a hard boiled prowler from the premises.

* * *

Fred Scholl, Memphis, Ind., recently threshed out some rice grown on Muddy Fork, by Dick Wade, former Louisiana rice grower, the rice threshing out an average of 100 bushels to the acre, which at a market of \$1.50 figures \$150 an acre for the crop. If the entire 40 acres work out as well it is believed the crop may prove worth growing there. Memphis is about 20 miles north of Louisville.

* * *

Louisville employment agencies recently received calls from southern Indiana, near Lafayette and other points for corn huskers and workers, there being a big crop, but shortage of hands.



THE unprecedented congestion of grain at Buffalo, growing out of the remarkable scarcity of freight cars and engines, which was augmented by the inadequate supply of canal boats, so that a virtual paralysis of the grain transportation resulted, has been a source of wide-spread worry among members of the grain trade on the New York Produce Exchange during the past month or more. Such huge quantities of grain had arrived at Buffalo via the Lakes and was largely detained there, that every member of the trade, and especially the exporters, were in a decidedly bad predicament, losing money at both ends, partly in the shape of demurrage charges. In short, they had engaged ocean freight room for the transportation of grain abroad for which they had made contracts weeks or months ago.

Meanwhile the grain was held up at Buffalo, and in some cases they were compelled to pay enormous demurrage charges, at times as much as \$800 to \$1,500 per day after the first three days. Manifestly it was of the most vital importance that every possible effort be made to bring about prompt relief and it was recognized that drastic steps must be taken in order to accomplish this. Hence a meeting of the grain trade was held at the New York Produce Exchange last month at which the following resolution was unanimously adopted:

Resolved: that this meeting request the Chairman of the Committee on Grain to select a Special Committee for the handling of the Buffalo grain situation, and that by making this request this gathering goes on record as approving these policies on the part of Grain Exporters:

That they will make every attempt to clear up vessels now afloat at Buffalo.

That they agree to restrict their purchases and their shipments from the West to a reasonable expectation of prompt discharge on arrival at Buffalo.

That they authorize the Special Committee to ask them for any information which will enable the Committee to make suggestions leading to these two ends. It being understood that previous commitments are excepted.

Pursuant to the request contained in this resolution, and for the purpose stated, the following special committee was appointed: James Ward Warner, Chairman; Julius H. Barnes, James J. O'Donohoe, Yale Kneeland.

One of the first steps of this committee in their efforts to improve the situation was to arrange with the Williamson Forwarding Company of Buffalo for a daily statistical report. These figures, which are

now posted daily on the bulletin boards of the Produce Exchange show the amount of grain received at the Buffalo elevators, the quantity afloat, the quantity in transit, the deliveries to cars, deliveries to canal boats, and deliveries for shipment to Montreal. The Committee also sent the following request for information to members of the grain trade:

"In order that this Committee may act promptly and intelligently, you are requested to furnish it immediately with the following information:

1. Name of vessel, quantity and grade of grain now afloat at Buffalo (delayed in unloading) for your account.

2. Name of vessel, quantity and grade of grain loading or in transit to Buffalo for your account.

3. Name of vessel, quantity and grade of grain, for which charters were made by you on or before October 11.

4. Details of purchases, for shipment via lake, made by you previous to October 11.

The Committee particularly calls attention to the second and third paragraphs of the above resolution, and expresses its full confidence that the agreements made therein by members of the Grain Trade will be carried out in good faith. Any information given to the Committee will be held in strict confidence."

* * *

The grain commission firm of M. B. Jones & Co., Inc., has recently added an export department to its business. Martin B. Jones, who was recently elected to membership in the Chicago Board of Trade, is head of the firm. Mr. Jones has been active on the New York Produce Exchange for 25 years as a broker and commission merchant in grain, and for five years prior



MARTIN B. JONES

to that he was identified with the trade in Buffalo. He was born in Illinois and learned the business in his father's office when a mere youth.

* * *

According to Walter Trappe, who is associated with James Norris as representative of the Norris Grain Company on the New York Produce Exchange, that company has the distinction of having cleared the largest cargo of wheat on record from the port of Galveston. This cargo amounted to 444,000 bushels and was shipped to Italy on the steamship *Emmanuel Accame*.

* * *

Ernest Reiner, prominent in the local grain market for several years as general manager of the Chesapeake Export Company, New York subsidiary of the J. Rosenbaum Grain Company of Chicago, returned to the Produce Exchange early in November after an absence of several months and was cordially welcomed by his many old friends and associates. During his absence Mr. Reiner made a trip to the Pacific Coast in order to investigate the affairs of his company in that quarter.

* * *

Members of various lines of business on the New York Produce Exchange, railroad and shipping men, as well as flour merchants and grain exporters, were greatly interested recently to learn of a new development in transportation affairs as a result of the extremely unsatisfactory traffic conditions. In short, New London, Conn., has blossomed forth as a port of international importance as a result of the great scarcity of freight cars and the consequent unwillingness of the railroad companies to allow their cars to run beyond the limits of their own lines. Canadian lines, for example, refused to allow their cars to pass on to tracks of United States owned lines, and hence exporters found it impossible to ship Canadian flour out of the usual northern ports, Boston and Portland.

Therefore it was found advantageous to divert the flour to New London as the Canadian lines controlled or were interested in the lines running into that city. It is stated that contracts have been made for over 600,000 barrels to be shipped in this way and several cargoes have already cleared for Great Britain and Mediterranean ports.

* * *

A meeting of the members of the grain trade on the New York Produce Exchange will be held on Monday, November 20, for the purpose of voting on the following proposed amendments to the rules of the grain trade and to the grading regulations on Mixed Feed Oats:

AMEND THE RULES OF THE GRAIN TRADE BY ADDING THERETO THE FOLLOWING GENERAL RULE FOR MIXED FEED OATS:

Mixed Feed Oats shall consist of less than 75 per centum of cultivated oats and may not contain in excess of 20 per centum of grains other than cultivated or wild oats.

No. 1 Mixed Feed Oats shall contain at least 50 per centum of cultivated White or Yellow Oats and may not contain in excess of 20 per centum of grains other than cultivated or wild oats, and may contain not to exceed 3 per centum of Foreign Material. Must be sound, cool and have a natural odor and weigh not less than 36 pounds, per Winchester Bushel. The percentage of moisture shall not exceed 14½.

No. 2 Mixed Feed Oats shall contain at least 20 per centum of cultivated White or Yellow Oats and may not contain in excess of 20 per centum of grains other than cultivated or wild oats, and may contain not to exceed 6 per centum of foreign material. Must be reasonably sound, cool and weigh not less than 36 pounds, per Winchester Bushel. The percentage of moisture shall not exceed 14½.

Sample Mixed Feed Oats shall be all grain meeting the requirements of the general rule for Mixed Feed Oats but which does not come within the limits of the grades No. 1 and No. 2 or which has any commercially objectionable foreign odor, or is heating, hot, sour or otherwise of distinctly low quality.

AMEND RULE 32 OF THE RULES OF THE GRAIN TRADE BY ADDING THERETO THE FOLLOWING NEW SECTIONS TO BE KNOWN AS SECTIONS 3 and 4:

Section 3.—In case any cash grain contracted for special delivery be not delivered in accordance with the terms of the contract the purchaser shall notify the Committee on Grain in writing of such default and the Committee on Grain shall immediately direct the buyer in what manner to buy in the defaulted contract within the next 24 hours. No fictitious price shall be countenanced by the Committee but any legitimate loss resulting to the buyer from the transaction shall be paid by the party in default.

Section 4.—Cash grain shall be considered in default in case margins properly called are not deposited in due course, and shall be subject to the procedure prescribed in Section 3 of this rule. The Committee on Grain, if requested, will act as Arbitrator as to the correctness of margin calls.

* * *

C. Sommer-Larsen, connected for several years with various grain firms on the New York Produce Exchange, has severed his connection with the Philadelphia Export Company, which he has latterly represented in this market.

* * *

Edgar D. George, active in the grain trade on the New York Produce Exchange for many years and for a long time treasurer and general office manager of the Brainard Commission Company, and also with the firm of Lewis, Proctor & Co., is now connected with E. A. Strauss & Co., Inc., grain exporters.

* * *

The Board of Managers of the New York Produce Exchange has elected the following applicants to membership: Charles J. S. Allen and Harry L. Webb of Webb & Kenward, Inc., grain exporters; Kurt J. Bartsch of the Chesapeake Export Company, grain merchants; Louis Veltri of B. F. Schwartz & Co., grain commission; Albert Wagner of George W. Van Boskerck & Son, flour and grain; Morris Gross of Gross Bros., flour merchants.

* * *

The following applications for membership in the Produce Exchange have been received: J. Murdoch Dennis of Dennis & Co., grain merchants of Baltimore; Archibald R. Dennis of Dennis, Brandt & Co., grain merchants, New York; Raymond J. Barnes of the Philadelphia Export Company, Philadelphia and New York; Bernard L. Harrington of Webb & Kenward, Inc., grain exporters; New York; Alfred J. J. Vedde of the Hansen Produce Company, Inc., grain merchants, New York; Samuel Mincer, grain commission merchant of Chicago; Richard D. Patton of Ansted & Burk, flour millers, Springfield, Ohio; Leo Brager, broker, New York; Michael J. Roe of B. F. Schwarty & Co., grain commission.

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John R. Mauff, secretary of the Chicago Board of Trade, who was a visitor recently among members of the grain trade on the New York Produce Exchange, stated that the Board had been receiving many complaints regarding the scarcity of cars, even from as far away as North Dakota. His many friends on 'Change expressed their appreciation of his highly interesting and instructive booklet entitled: "The Growth of Agriculture & Grain Marketing," which embraces a brief synopsis of the agricultural development of the country and a concise history of the Chicago Board of Trade.

* * *

Members of the New York Produce Exchange and especially in the flour and grain trade were greatly shocked early in November to hear of the sudden death of their esteemed friend and associate Alfred Romer, vice-president and general manager of Schults Bread Company. Mr. Romer had been actively engaged as

usual in the flour market, apparently in his usual good health and spirits, on the very morning of his sudden passing away, notwithstanding his age, namely 83 years. He was on his way to his home in Pleasantville, N. Y., when he died suddenly of cerebral hemorrhage in the Grand Central Station. Mr. Romer was one of the oldest members of the Produce Exchange and had always taken an active interest in its affairs as demonstrated by the fact that he was a member of the Board of Managers for various terms almost continuously from 1882 to 1892, was vice-president from 1892 to 1894 and president for one term 1894 to 1895. He was chairman of the Arbitration Committee at the time of his death.

James Simpson, for several years active as a flour salesman in the Metropolitan district, has now formed a connection with Francis H. Leggett & Co., well-known wholesale distributors of food products, to handle flour and bakers' supplies.

The following visitor from Chicago were registered on the Produce Exchange floor during the past month: George E. Fuller, now retired, but for many years an active member of the big grain commission firm of Bartlett Frazier Company; J. C. Sime, of the Bartlett Frazier house; A. S. Jackson of Jackson Bros. & Co., commission merchants; T. J. Brosnahan of Thomson & McKinnon, grain and stock merchants; J. A. White, floor manager on the Board of Trade for Lamson Bros. & Co., commission merchants; J. Faroll of Faroll Bros., grain commission merchants; Frank G. Ely, the well-known oats specialist; Gardiner B. Van Ness, commission merchant; Thomas M. Howell, prominent grain operator; H. H. Newell, vice-president of the Rogers Grain Company; Arthur W. Cutten, grain commission merchant; A. G. Sullivan, prominent in shipping circles; Fred. Strobe, chief operator of the national wire service of Jackson Bros. & Co.; and Paul Picard of the same firm.

TOLEDO

C. O. BARNHOUSE - CORRESPONDENT

THE "Big Chief" has been called to the happy hunting ground. The many friends of Chief Grain Inspector Edward H. Culver were filled with sorrow when the word came on October 26 that he had passed away. Notwithstanding the fact that it was known that he was suffering from a malady of long standing the end came suddenly and unexpectedly and caused a shock among his friends and acquaintances. In his realm Ed. Culver was a world character. His circle of acquaintances was not circumscribed by the confines of the Toledo market area, but wherever modern marketing and inspection methods are in vogue he was known. He had been a sufferer for the last two or three years with diabetes, but remained with his task until within four weeks of his death when he retired to his home to undergo an operation of no especial seriousness, and from which he seemed to be recovering when an unexpected attack of heart failure brought the crisis.

He had been employed about the Toledo Produce Exchange for the last 40 years, first for about 10 years as a private sampler for some of the firms who handled grain through the exchange and for the last 30 years as Chief Grain Inspector. He was noted for the integrity of his work in which he endeavored to attain perfection. It was his pride to so conduct his work that when appeal was taken from his inspection that his grading would be upheld by the Supervisor and it was in only a small number of instances that changes were made. Of course there were those who disagreed with him at times, but no one ever questioned his integrity who knew how he performed his duties.

Six children survive the father, Mrs. Culver having died about six years ago. The children are: Miss Stella Culver, who presided in the home after her mother's passing, Mrs. Thos. Heron, Mrs. Millie Coady, and three sons, George, Frank and Edward B. George is employed in the Toledo Inspection Department, over which his father presided so long. Mr. Culver was a member of the Masonic and Odd Fellow fraternities. Funeral services were held on Monday, October 30, members of the Exchange acting as pallbearers.

The elevator of the Jewell Grain Company, of Jewell, Ohio, which was destroyed by fire October 9 will be rebuilt soon, the directors at a recent meeting having decided to replace the burned structure with a new one, upon which work will begin at once. The new building will probably be constructed of concrete although some consideration is being given to cribbed wood construction. The new plant will occupy the site of the old one.

The National Milling Company has called a stockholders meeting for November 29 to consider the proposition of increasing the capital stock from \$200,000 to \$600,000. If the proposal is approved it is intended to distribute a stock dividend of \$400,000. This

will be done to take care of a surplus which has been accumulating for a number of years. This company is also putting on a program of enlarged distribution of their products, notwithstanding the fact that their business is already of an international character. They operate the largest milling plant in the city and only recently completed an up-to-date office building at their plant on the East side.

Early Bloom, of Bowling Green, Ohio, vice-president of the Randolph Grain Company, of Toledo and well known on the exchange here was elected Lieutenant Governor at the recent election. As he and Vic Donahay, candidate for governor, were the only successful Democrats on the state ticket it speaks well for his standing among the Ohio folks.

Harris, Winthrop & Co. discontinued their private wire branch on the trading floor of the Toledo Produce Exchange November 9 and Thomas & McKinnon have taken it over. Jas. T. Mattemore is the manager. A. W. Mansfield and J. E. Delaney were down from Chicago to look after the details of the transfer for Thomas & McKinnon, Mr. Delaney remaining several days.

The Coleman Elevator Company, Coleman, Mich., has installed a Randolph Direct Heat Bean Drier.

Samuel Hessian, grain and implement dealer of Defiance, filed a petition in bankruptcy in the Federal Court at Toledo, October 21, showing liabilities of \$119,571.10 and assets of \$139,650.73.

Among those who attended the fall meeting of the Ohio Grain Dealers at Lima, Ohio, October 26, were Fred Mayer and W. W. Cummings, of J. F. Zahm & Co., Chas. Keilholtz of Southworth & Co., Geo. D. Woodman of H. W. De Vore & Co. and Louis Schuster of the Raymond P. Lipe Company.

The Interstate Commerce Commission recently sent Inspector B. C. Robertson to Toledo to investigate the car shortage. L. G. Macomber, traffic commissioner of the Produce Exchange, accompanied him on a tour of the railroad yards and terminals to get a first hand view of conditions here. There has been a slight improvement in the car situation, but the shortage is still severe and acts as a serious handicap to business.

Leroy L. Winters, of Hulburd, Warren & Chandler, Chicago was the speaker at the noon luncheon of the Toledo Rotary Club on Friday November 3. His subject was: "Dangers which threaten the Constitution." He spoke of the dangers involved in the march of our Government toward radicalism, bureaucracy, paternalism and democracy as exemplified in the election of United States senators by popular vote, the persecution of commercial activities by governmental departments, bureaus and commissions, and tampering with the Federal Reserve Banking Act, etc. His address was well received and the Rotarians enjoyed and appreciated it very much. Several members of the Produce Exchange were present as guests of the club. Mr. Winters also spent several hours on the trading floor while here.

Arrangements are being made to care for several grain laden vessels in the Toledo harbor this winter, as was done last year. Facilities will be provided for about 15 of the large lake carriers. Owners of grain which is to be wintered aboard ship prefer to hold it at Toledo if possible as it gives them the advantage of a larger outlet for the same than if it is shipped farther down lake this fall.

Raymond P. Lipe and Kent Keilholtz were in Chicago recently.

J. H. McMillan, of the Cargill Elevator Company, Minneapolis, Minn. was in Toledo not long ago.

G. W. Beaven, of J. S. Bache & Co. and Jim White, of Lamson Bros. & Co., Chicago called on Toledo friends recently.

Andrew Law, of Crawford & Law, flour importers of Glasgow, Scotland, who is touring America in the interest of his firm, visited Toledo last week.

W. C. Graham, of Northeast, Pa., eastern representative of the Toledo Grain & Milling Company, visited the home office last week and called on friends on the exchange.

GRAIN NEWS FROM BOSTON

BY L. C. BREED

About the middle of October, hearings were held before the Interstate Commerce Examiner at the State House in Boston, and the scene of action was at the close, shifted to Washington, where on November 13 the second phase of the differential freight rate fight will open before the Commission, followed a short time later by the final hearings at Philadelphia. Manager Davis of the Chamber in his testimony declared that all the port of Boston wants in the matter of rates is a "square deal." It was quite evident that Philadel-

phia, through the action of the milling interests in providing for a great flour shipping base at that port, now has the call on flour. George W. Eddy of C. F. & G. W. Eddy testified that unfavorable rates to Boston cause his firm to ship very little grain through Boston, requiring them to prefer other North Atlantic ports, including Montreal. In the past two years they had shipped more through Baltimore, which has enjoyed a lower rate. In sending grain through Baltimore, however, they have to pay a brokerage charge of a quarter of a cent a bushel, which occasionally is prohibitive. The rail rates on "ex-lake grain" from Buffalo to Baltimore and Philadelphia are lower than are those to Boston. However, his firm, for the sake of keeping their facilities here occupied, has made some shipments through this port for some months, and has taken the loss arising from the differential. His firm, he stated, has been doing a \$20,000,000 business a year through all ports for the past two years.

F. L. Davis of the Maritime Department of the Chamber and Judge Edgar E. Clark counsel, recently carried a message in behalf of New England interests to Washington and the same was tendered to President Harding, in an interview, assuring him that the business men of this section are solidly united in support of the shipping bill. They also favor, he was informed, the purchase of the Cape Cod Canal.

As the result of complaint by the Chamber that a shortage of cars for moving freight was interfering with the New England grain trade's business, the Interstate Commerce Commission sent an investigator to Buffalo for the purpose of endeavoring to relieve the shortage from that point.

W. H. Chandler of the transportation department of the Chamber had interviewed the I. C. C. officials at Washington, and as the result of his conference with them the Commission assigned the investigator referred to. It was claimed at Buffalo that the trouble was mainly owing to the urgent orders to handle west-bound lake coal, which resulted in placing cars in export trade to insure quick return of empties.

The Chamber, along back and at present, has been co-operating with the Minneapolis committee which has in charge the matter of conducting the fight against legislation controlling trading in grain futures. There is strong objection felt to the provision which admits of membership of persons identified with the co-operative farmers organizations, and yet does not require them to conform to the rules in effect in the grain exchanges.

The London, Hull and Leith service of the Oriole Steamship Lines, will hereafter include a call at Dundee, Scotland.

The Toys Kisen Kaisho, a Japanese steamship company, has arranged for a series of sailings from this port to the far East, with a view to making this Oriental service permanent.

This year's hay crop in Maine is reported to be about double that of a year ago and the price is about \$10 per ton lower. It is claimed that there is less demand than in former years owing to a great decrease in the number of cattle on Maine farms. The entire New England consuming section is reported to have a larger supply than last year owing in part to abundant moisture last summer, but notwithstanding this, hay is being shipped into this territory from Ohio, Michigan and New York.

NEWS FROM NORTHERN OHIO

BY T. J. CUNNINGHAM

According to Auditor Joseph T. Tracy, the incoming Ohio state legislature will have over \$5,000,000 to spend during the next year on road improvement.

Ottawa County farmers report that corn is averaging a little better than half a crop this fall. The average for the county is estimated at 50 bushels to the acre.

John Smith broke a wrist and was otherwise painfully injured, when he fell from the second story of the Horn Bros. Company's elevator, Monroeville, upon the concrete floor. He was taken to Memorial Hospital at Norwalk.

According to official report from the Ohio Farm Bureau Federation, Ottawa County has the largest per cent of paid-up membership and the second largest aggregate membership.

Harris and Salem Townships are the only townships in Ottawa County not included in the European corn borer quarantine area.

According to C. J. West, state-Federal statistician, the Ohio corn crop this year will total 155,000,000 bushels, which is slightly less than the crop of 1921. Condition of the corn crop is 5 points below last year's crop, but a 3 per cent increase in acreage offsets the former loss.

R. D. Sneath, vice-president of The Sneath-Cunningham Company, Tiffin, has been appointed by President John Puelicher of the American Bankers' Association, as

district representative of the Fourth Federal Reserve district. The appointment was made at a meeting of bankers of Group 3 held in Toledo, October 25.

The hay and straw storage barn of Wochholz & Gress, Albion, Mich., burned with contents, causing a loss of \$4,000, fully covered by insurance. Two motor trucks were damaged to the extent of \$1,000.

There is some talk of having Ohio fuel administration authorities seize Ohio coal mines unless Federal authorities arrange to keep enough of Ohio's coal from going outside the state. It is said that domestic coal going outside the state is bringing higher prices than those allowed producers who sell in Ohio.

Weevil have been causing considerable trouble to farmers and elevator men this fall, due to car scarcity and the prolonged warm weather. The Experiment Station has been advising farmers to use disinfectants and destroy the weevil before the cold weather sets in.

A great fire has been burning for two weeks over a two-mile area in the marsh lands of Huron County. In many places the peat has burned to a depth of five feet or more. Trenches have been plowed around burning places and the fire is said to be now under control.

According to cropsmen at Ohio State University, there is now no danger of a lack of seed corn from this year's crop. Good drying weather this fall hastened the maturing of lots of late-planted corn.

The Farmers' Exchange Company has asked the Tiffin city council to vacate a 200-foot section of Railroad street, which is crossed by a railroad siding and now impassable. The company wants to acquire the property, which is back of its elevator, so as to be able to make improvements to permit use of both sides of the track for unloading fertilizer.

The Emery Thierwechter Company's mill at Oak Harbor is operating 24 hours a day. The output has been increased to 1,300 barrels of flour a week.

A farm near Oak Harbor yielded 80 bushels of corn to acre,—a record so far this year. Elevators in this locality report an average corn yield of about 40 bushels to the acre.

Claude Fogelman, of the Tiffin Farmers' Exchange Company, was one of the speakers at a meeting of Hopewell Township Farm Bureau, November 8.

Luckey, Ohio, reports that corn in that vicinity is of good yield and quality.

Laverne Gross, near Blissfield, Mich., raised three acres of corn eligible for certification. He is guaranteed \$4 per bushel by the state.

The directors of the Jewell Grain Company, Jewell, Ohio, have voted to rebuild the elevator which burned October 9. The new structure will be on the site of the old building.

James F. Bowman has brought suit against Edward L. King and the Farmers' Exchange Company, Tiffin. Bowman claims that he bought five shares of the company's stock at \$500, June 19, 1920, with the understanding that he could return it to the company and receive the money at any time.

The mill of the Loudonville Mill & Grain Company, Loudonville, Ohio, burned on the morning of November 8. The mills were in operation at the time, and when discovered the third story was ablaze. They have not decided yet what their future course will be. Loss was partially covered by insurance.

The condition of the wheat crop throughout this territory is very good and the acreage large. The prolonged warm weather this fall gave farmers the opportunity of putting out corn ground that otherwise might have gone to oats. Unlike the wheat crop of last year, this crop has nowhere grown very rank, but it has a good, healthy color and is from 2 to 3 inches in height. What it lacks in this respect is made up in the way it has rooted, as plants examined had roots from 2 to 2½ inches long, which had a tenacious hold in the ground. Looked at from any angle it is in fine shape to go into the winter. In some localities farmers are complaining of the lack of moisture, but do not think the wheat has suffered any from this source. It is a noticeable fact that everywhere the grass and wheat fields are still quite green, in spite of the unusual lack of rain this fall. There has been scattered mention of the fly in various localities here, but, so far, have been unable to obtain any first-hand evidence that would bear this out.

The corn crop here is turning out wonderfully well, both in yield and quality. There is very little soft corn to be found. It was thought early that much of the late-planted corn would not mature, but the prolonged warm weather ripened this in good shape. Farmers have been so badly disappointed in other crops this year that they are taking unusual care

in the harvesting of this corn crop. While shredders are in evidence everywhere, nevertheless a large portion of the crop is being hand-husked and sorted. There is quite an acreage of standing corn, however, where the ears are being "snapped" and the fodder allowed to stand. Such corn is dry and hard as bone. The price paid to farmers for new corn this year is closer to the price of old corn than has been the case for many years. For this reason, think there will be a heavy movement of new corn from the fields.

Buying of oats in this territory has almost become a lost art. Were it not for the car shortage, it would be difficult to find more than car or two of oats in any elevator in this locality.

There is still quite a little Clover seed to be picked up here, but it is in scattered lots of small amounts. The quality is generally very good. What is being held now is in the hands of farmers who are not compelled to sell, and they are gambling with it for higher prices.

Timothy seed is pretty well gathered up, and do not think any of the country dealers are holding any big blocks of it.

The car situation seems to get worse all the time, and it is fortunate that receipts at country points are light at this time, or dealers would be having lots of trouble keeping their grain in condition.

RECEIPTS AND SHIPMENTS

Following are the receipts and shipments of grain, etc., at the leading terminal markets in the United States for October:

BALTIMORE—Reported by James B. Hessong, secretary of the Chamber of Commerce:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus...	1,093,377	1,320,394	1,739,437
Corn, bus....	1,870,518	508,845	965,304
Oats, bus....	492,152	52,727	245,000
Barley, bus...	154,314	79,281	149,864
Rye, bus....	1,409,395	605,282	1,120,130
Malt, bus....	125,458	.....	39,551
Millfeed, tons	1,815	1,901	.....
Straw, tons..	34	102	.....
Hay, tons....	703	985	.....
Flour, bbls...	151,620	142,387	81,408

CAIRO—Reported by M. C. Culp, chief grain inspector, weighmaster of the Board of Trade:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus...	2,290	10,350	8,422
Corn, bus....	49,527	319,787	205,906
Oats, bus....	1,555,314	996,880	1,480,456

CHICAGO—Reported by John R. Mauff, secretary of the Board of Trade:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus...	3,900,000	1,956,000	2,640,000
Corn, bus....	17,820,000	21,290,000	13,234,000
Oats, bus....	9,235,000	5,753,000	4,945,000
Barley, bus...	1,017,000	566,000	346,000
Rye, bus....	410,000	107,000	268,000
Timothy Seed, lbs.	4,577,000	4,586,000	4,934,000
Clover Seed, lbs.	1,293,000	1,235,000	842,000
Other Grass Seed, lbs.	3,302,000	2,445,000	815,000
Flax Seed, bus.	167,000	43,000	.....
Hay, tons....	13,143	12,475	496
Flour, bbls...	1,515,000	1,006,000	1,229,000

CINCINNATI—Reported by D. J. Schuh, executive secretary of the Cincinnati Grain & Hay Exchange:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus...	338,400	432,500	281,400
Shelled Corn, bus.	382,800	301,200	212,400
Oats, bus....	282,000	286,000	190,000
Barley, bus...	6,500	.....	.....
Rye, bus....	37,200	22,800	3,600
Hay, tons....	4,037	6,688	.....

DULUTH—Reported by Chas. F. MacDonald, secretary of the Board of Trade:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus...	9,521,538	9,725,326	9,556,515
Corn, bus....	348,296	1,211,758	225,032
Oats, bus....	167,816	393,010	130,603
Barley, bus...	754,053	666,252	343,685
Rye, bus....	4,521,442	1,414,409	2,835,909
Flax Seed, bus.	1,161,153	566,852	596,775
Flour, bbls...	661,700	1,570,590	762,285

FORT WILLIAM, ONT.—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus...	65,119,880	46,163,222	52,699,691
Corn, bus....	3,139	102,195	1,570
Oats, bus....	4,537,450	4,060,589	2,763,301
Barley, bus...	4,098,315	1,745,691	2,383,119
Rye, bus....	2,124,454	785,754	1,383,443
Flax Seed, bus.	510,375	237,727	167,647
Mixed Grain, lbs.	12,755,300	3,373,696	1,244,970

INDIANAPOLIS—Reported by Wm. H. Howard, secretary of the Board of Trade:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus...	398,000	205,400	246,000
Corn, bus....	2,468,000	1,472,800	882,000
Oats, bus....	1,028,000	1,364,000	762,000
Rye, bus....	67,000	23,800	35,000
Flour, bbls...	47,039	43,256	.....

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus...	7,082,100	7,195,500	4,401,000
Corn, bus....	6,587,750	928,750	533,750
Oats, bus....	780,300	620,500	372,000
Barley, bus...	27,000	87,000	25,500
Rye, bus....	16,500	51,700	22,000
Bran, tons...	5,240	3,160	19,580
Kaffir Corn, bus.	119,900	209,000	55,000
Hay, tons....	22,056	20,868	4,704
Flour, bbls...	116,350	94,250	556,075

LOS ANGELES—Reported by M. D. Thiebaud, secretary of the Grain Exchange:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, car-loads	313	227	.....
Corn, carloads	90	192	.....
Oats, carloads	80	44	.....
Barley, car-loads	201	94	.....
Rye, carloads	4	3	.....
Flour, bbls...	156	160	.....

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus...	417,200	513,000	197,785
Corn, bus....	1,740,520	2,890,200	1,820,935
Oats, bus....	2,299,545	2,633,190	1,720,995
Barley, bus...	1,123,380	1,067,595	349,990
Rye, bus....	326,865	109,810	186,590
Timothy Seed, lbs.	1,050,000	947,239	160,065
Clover Seed, lbs.	500,231	385,433	409,535
Flax Seed, bus.	71,735	140,760	9,554
Feed, tons...	11,540	7,740	20,583
Hay, tons...	1,584	2,045	1,464
Flour, bbls...	306,390	151,620	162,130

MINNEAPOLIS—Reported by G. W. Maschke, statistician of the Chamber of Commerce:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus...	16,719,550	18,019,510	5,170,950
Corn, bus....	490,890	1,088,780	218,480
Oats, bus....	3,376,370	4,695,940	4,661,850
Barley, bus...	1,506,010	1,311,170	1,142,100
Rye, bus....	1,847,430	868,250	668,810
Flax Seed, bus.	1,072,430	1,191,540	195,960
Hay, tons...	2,240	2,770	172
Flour, bbls...	116,590	105,685	2,062,309

NEW ORLEANS—Reported by G. S. Colby, chief grain inspector and weighmaster of the Board of Trade, Ltd.:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus...	2,914,596	2,305,740	.....
Corn, bus....	2,981,016	875,377	.....
Oats, bus....	48,735	107,010	.....
Barley, bus...	.....	50,427	.....

NEW YORK—Reported by H. Heinzer, statistician of the Produce Exchange:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus...	4,434,200	10,925,415	2,847,000
Corn, bus....	2,390,600	563,176	1,318,000
Oats, bus....	2,960,000	730,845	1,776,000
Barley, bus...	1,001,600	536,775	392,000
Rye, bus....	1,357,000	178,857	1,171,000
Timothy Seed, lbs.	.....	.....	982

Other Grass—Reported by H. Heinzer, statistician of the Produce Exchange:

Receipts		Shipments	
1922	1921	1922	1921
Seed, lbs...	2,134	1,570	.....
Flax Seed, bus.	194,000	.....	.....
Hay, tons...	7,440	5,566	2,239
Flour, bbls...	798,988	1,178,600	381,000

OMAHA—Reported by F. P. Manchester, secretary of the Produce Exchange:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus...	2,905,000	2,161,600	1,906,800
Corn, bus....	2,083,200	1,282,400	1,239,400
Oats, bus....	1,340,000	886,000	1,068,000
Barley, bus...	88,000	160,000	30,400
Rye, bus....	250,600	235,200	138,600

PEORIA—Reported by John R. Lofgren, secretary of the Board of Trade:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus...	335,650	91,480	379,000
Corn, bus....	2,767,670	1,708,795	2,285,700
Oats, bus....	1,797,950	1,247,565	1,554,600
Barley, bus...	79,400	46,200	54,600
Rye, bus....	25,200	3,200	31,150
Mill Feed, tons	34,020	11,600	28,050
Hay, tons....	3,720	870	180
Flour, bbls...	179,700	262,100	189,800

PHILADELPHIA—Reported by S. S. Daniels, secretary of the Commercial Exchange:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus...	4,919,302	4,099,734	3,391,569
Corn, bus....	1,472,275	324,604	1,025,890
Oats, bus....	771,371	243,507	360,000
Barley, bus...	1,391	.....	.....
Rye, bus....	106,188	261,957	160,278
Flour, bbls...	265,343	261,275	53,591

ST. LOUIS—Reported by Eugene Smith, secretary of the Merchants' Exchange:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus...	39,459,936	3,510,165	2,909,580
Corn, bus....	2,524,600	2,369,094	1,949,550
Oats, bus....	2,820,000	2,477,225	2,001,190
Barley, bus...	81,600	124,800	41,480
Rye, bus....	82,500	73,700	14,460

Kaffir Corn—Reported by Eugene Smith, secretary of the Merchants' Exchange:

Receipts		Shipments	
1922	1921	1922	1921
bus.	9,600	54,500	4,830
Hay, tons...	11,019	13,545	3,345
Flour, bbls...	417,860	589,380	638,140

SAN FRANCISCO—Reported by H. C. Bunker, chief inspector of the Chamber of Commerce:

ASSOCIATIONS

OHIO DEALERS MEET AT LIMA

About 125 grain shippers, co-operatives and independents, including terminal market representatives, met at Lima, Ohio, October 24, to discuss the fall movement of corn and at what margins the various grains should be bought. It was the regular fall meeting of the Ohio Grain Dealers Association. President E. T. Custenborder of Sidney presided over the sessions, which were held in the Lima Chamber of Commerce.

President's Address

After a brief welcome, President Custenborder read his address as follows:

Fellow Grain Dealers: We have gathered here today to consider a few of our more important problems.

The problems of grain merchants regardless of the name or style of their particular company do not materially differ. Our operating expenses are similar. Our object the same, to please our patrons and satisfy our stockholders, which is not always an easy task.

To buy at a price that is satisfactory to our patrons, and to sell at a price that will leave a margin sufficient to enable us to earn a dividend for our stockholders is one of our more important problems.

The cost of handling grain is the first and probably the greatest single factor in the solution of this problem. How many of us really know what it costs us to handle each of the various grains? In the absence of knowledge of approximate handling costs we have no standard on which to base our buying price.

The foremost idea in the minds of many of us seems to be "to get the business." The result of our efforts apparently does not occur to us. An individual of a company who properly conducts the business of merchandising grain renders a valuable service and is entitled to reasonable compensation for the service.

If our patrons were more familiar with handling costs and hazards of merchandising grain and supplies they would appreciate rather than complain of the service we render them.

Offering more for grain located nearer to the elevator of our competitor than we are regularly paying for grain near our own elevator is unethical; unfair to our patrons, to our competitors and to ourselves. We have no moral right to be unfair to others, much less to ourselves.

Buying and paying for grain with but little regard as to the quality and condition is a problem that not only concerns merchants but producers and consumers as well.

The Commercial Farm Bureau and Scoop Shovelers are a pair whose activities and service should receive the attention of producers, merchants and consumers. The result will be to their mutual benefit and interest.

Engaging grain in fields and cribs for distant future delivery, gambling with the elements, we lose when we win. An element of speculation is involved with which but few are able to cope.

A discussion of the corn situation was opened by H. G. Pollock of Middlepoint, who said: "I have always brought samples of corn to this meeting, but this year we had an excellent crop, fully matured. We had no blue corn, mostly all yellow and no small ears. What will worry us is the profitable marketing of the corn. Some dealers are paying 75 to 80 cents per 100 pounds and it is being discounted about 10 cents on account of high moisture content. I am glad to say the price is high on account of the farmer, but it is difficult for the dealer to pay these high prices. The car situation is responsible more or less for present high prices. It is a bad feature when the dealer starts losing at the beginning of the crop. It costs more to handle new corn with double the risk over old corn, and when the movement starts with such high prices, it is difficult to make any money. You cannot make money in handling corn at only three or four cents margin. We should have a larger margin on this new crop."

A number of dealers responded to the president's request as to prices paid for the new corn and it was generally conceded that a fair price and that which was largely paid was around 70 cents per 100 pounds. O. P. Hall of Greenville reported that he had paid 70 cents for two cars of new corn the previous week and I. W. McConnell of the McConnell Grain Corporation of Buffalo, N. Y., read a telegram from the firm that Buffalo received two cars of new corn the day previous. It graded No. 6 and sold at 74½ cents. It came from the western part of Indiana and was the first to arrive.

President Custenborder said he had been trying for 25 years to induce the farmer to plant corn that would make a good yield. He snowed a small ear of corn that he said would produce from three to five bushels more per acre than the larger corn.

The coal situation was also discussed by some of those who handled that product.

The discussion of the corn situation was continued at the afternoon session and just before final adjournment an invitation was accepted from the Cleveland Grain & Hay Exchange to hold the summer meeting of 1923 in that city.

Those Who Attended

Central markets were represented as follows: Columbus—Omer Snyder, Columbus Grain & Hay Company; C. O. Garver, inspector for J. W. McCord

Insurance Agency; Philip P. Sales, Smith-Sayles Grain Company; W. S. Cook, McCord & Kelly; Arthur Cratty.

Fostoria—A. T. Ward, Townsend-Ward Company; J. L. Cruikshank.

Sidney—E. T. Custenborder and J. C. Custenborder, Custenborder Grain Company; J. E. Wells, J. E. Wells Company.

Middlepoint—H. G. Pollock and C. A. Pollock, Pollock Grain Company; Chas. F. Pierce, Pierce & Stevens.

Mansfield—D. M. Cash, Federal Mill & Elevator Company.

Greenville—O. P. Hall and E. E. Horn, E. A. Grubbs Grain Company.

From terminal markets: Buffalo—I. W. McConnell, McConnell Grain Corporation; C. B. Weydman and E. A. Schaub, Eastern Grain, Mill & Elevator Corporation; F. H. Reifsteck, S. M. Ratcliffe.

Cleveland—J. C. Johnson, Cleveland Grain & Milling Company.

Toledo—Chas. R. Keilholtz, Southworth & Co.; C. E. Patterson, John Wickenhiser & Co.; G. D. Woodman, H. W. DeVore & Co.; L. J. Shuster and G. W. Churchman, Raymond P. Lipe Company; Geo. A. Kragloh, Toledo Field Seed Company; Fred Mayer and W. W. Cummings, J. F. Zahm & Co.

Pittsburgh, Pa.—J. A. A. Geidel and Norman Geidel, Geidel & Leubin.

The machinery and building interests were represented by John G. Troester, treasurer and manager of Sidney Grain Machinery Company, Sidney, Ohio; Rhinehart Smith, Conover, Ohio.

The grain dealers included: J. G. Stimmel, Payne; C. A. Hiegel, Leipsic; C. J. Pfau, Bolivar; F. G. Sprang, Foraker; Isaac Kearns, Foraker; Willard Doren, Bryan; D. J. Lloyd, Waterville; O. E. Richardson, Celina; La Verne Berryhill, Fletcher; E. M. Colton, Bellefontaine; A. M. Daugherty, Derby; G. A. Tauney, Hamler; Calvin Amstutz, Pandora; Ralph Andrews, Celina; Kirby White, Harrod; J. A. Vore, Cairo; P. F. Chambers, West Mansfield; W. G. Guscott, Olmstead; C. S. Young, Bowling Green; O. C. Robinson, Deshler; E. L. Diller, Bluffton; H. H. Bowsher, Lima; Jesse A. Stemen, Convoys; Omar Pond, Van Wert; D. A. Bricker, Lima; A. B. Beverstock, Lexington; E. C. Eikenberry, Camden; C. M. Eikenberry, Hamilton; R. C. Calvelage, Fort Jennings; C. G. Gormley, Berkey; S. L. Rice, Metamora; Ed. Fauble, Swanton; J. R. Clendenin, Lyons; F. B. Nachtrieb, Metamora; B. R. Hoaglin, Scott; J. O. Case, Lima; W. G. Bennett, McComb; O. H. Pool, Waynesfield; G. O. Cruikshank, Leipsic; J. M. Pence, Jackson Center; B. Davis, Elida; C. W. Andrews, Maplewood; Rudolph Raabe, Ft. Jennings; Alpha Evilisizer, Tremont City; Thos. R. Stephenson, Maplewood; J. M. Stewart, Quincy; W. F. Rultz, Okolono; W. M. Helberg, Okolono; True Felger, Van Wert; C. H. Donaldson, Continental; W. S. Bricker, Haviland; N. C. Shirley and W. H. Kelly, Continental; C. W. Pontius, Lewisburg; W. J. Odenweller and Ed. G. Odenweller; Kalida; D. R. Risser, Vaughnsville; Pearl Burket, Rawson; F. E. Geise, Delphos; Ray Hedding, Martel; D. H. Smith and J. C. Lepner, Climax; F. L. Kauffman, Milton Center; H. W. Martin, Columbus Grove; Chas. B. Krohn, Deshler; G. E. Stephenson, Rosewood; Roy H. Ritchie, Hume; C. A. Latimer, Rockford; Ralph Krogman, Rockford; Ed. A. Hess, Coldwater; T. H. McConnell, New Bremen; J. B. Peters, Kempton; Coleman Allen, Troy; H. J. Boogher and A. G. Boogher, Santa Fe; E. J. Garmhousen, St. Marys; V. H. Jackson, St. Johns; W. D. Anderson, Union City, Ind.; Wm. P. Hiegel, Dawn; G. L. Schafer, North Creek; J. W. Dickman, Pleasant Bend; M. M. Miller, Continental; D. J. Wollet, Rockford; A. L. Elliott, Stony Ridge; H. F. McDonald, Greenville, Ill.; H. C. Potthast, Greenville, Ill.; Geo. C. Thieman and J. H. Wochmeyer, Minster.

NATIONAL COMMITTEES

President F. E. Watkins of the Grain Dealers National Association has announced the full committee roster for the year, as follows:

Arbitration Appeals Committee: Elmer Hutchinson, chairman, Arlington Ind.; W. W. Manning, Fort Worth, Texas; Jno. S. Green, Louisville, Ky.; A. S. MacDonald, Boston, Mass.; H. A. Rumsey, Chicago, Ill.

Arbitration Committee No. 1: J. R. Murrell, Jr., chairman, Cedar Rapids, Iowa; C. S. Rainbolt, Omaha, Neb.; O. F. Bast, Kansas City, Mo.

Arbitration Committee No. 2: Frank B. Bell, chairman, Milwaukee, Wis.; H. W. Reimann, Shelbyville, Ind.; E. H. Bingham, Cedar Rapids, Iowa.

Arbitration Committee No. 3: S. L. Rice, chair-

man, Metamora, Ohio; F. A. Coles, Middletown, Conn.; Thos. C. Craft, Jr., Baltimore, Md.

Arbitration Committee No. 4: E. W. Crouch, chairman, McGregor, Texas; E. Wilkinson, Birmingham, Ala.; Tom F. Connally, Clarendon, Texas.

Arbitration Committee No. 5: H. C. Gamage, chairman, Kansas City, Mo.; Dick O'Bannon, Sherman, Texas; L. C. McMurty, Pampa, Texas.

Arbitration Committee No. 6: I. C. Sanford, chairman, Portland, Ore.; W. J. McDonald, Seattle, Wash.; Rudolph Volmer, San Francisco, Calif.

Feed Arbitration Committee: J. H. Caldwell, chairman, St. Louis, Mo.; H. R. Wilbur, Jamestown, N. Y.; J. A. Canfield, Minneapolis, Minn.

Committee on Legislation: A. E. Reynolds, chairman, Crawfordsville, Ind.; E. M. Wayne, Delavan, Ill.; E. C. Eikenberry, Camden, Ohio; J. C. Mytinger, Wichita Falls, Texas; L. W. Forbell, New York, N. Y.

Committee on Trade Rules: C. D. Sturtevant, chairman, Omaha, Neb.; T. W. Hall, Minneapolis, Minn.; Lee D. Jones, Memphis, Tenn.; H. L. Strong, Wichita, Kan.; A. W. Goodnow, Boston, Mass.

Committee on Transportation: Henry L. Goemann, chairman, Mansfield, Ohio; G. Stewart Henderson, Baltimore, Md.; Geo. E. Booth, Chicago, Ill.

Committee on Merchant Marine: C. B. Fox, chairman, New Orleans, La.; Geo. S. Jackson, Baltimore, Md.; Julius W. Jockusch, Galveston, Texas.

Committee on Membership: E. F. Huber, chairman, Minneapolis, Minn.; Philip C. Sayles, Columbus, Ohio; D. M. Cash, Mansfield, Ohio; P. Kilmartin, Malvern, Iowa; C. B. Helm, Cleveland, Ohio.

Hay and Grain Joint Committee: W. I. Biles, chairman, Saginaw, Mich.; Geo. S. Bridge, Chicago; R. M. White, Duluth, Minn.

Committee on Uniform Grades: Bert Dow, chairman, Davenport, Iowa; Jas. F. Hammers, Boston, Mass.; J. M. Rankin, Cambridge, Neb.; O. P. Hall, Greenville, Ohio; Dan Joseph, Columbus, Ga.; J. S. Klingenberg, Concordia, Kan.; John L. Barr, Denver, Colo.; Lew Hill, Indianapolis, Ind.; H. T. Goodell, Hobson, Mont.; John E. Bishop, Houston, Texas; Geo. H. Martin, Los Angeles, Calif.; Monroe A. Smith, Philadelphia, Pa.

Grain Products Committee: E. C. Dreyer, chairman, St. Louis, Mo.; E. T. Stanard, St. Louis, Mo.; A. M. Blaisdell, Minneapolis, Minn.; M. D. Levy, Louisville, Ky.; M. F. Baringer, Philadelphia, Pa.

Committee on Crop Reports: G. E. Blewett, chairman, Fort Worth, Texas; W. S. Washer, St. Joseph, Mo.; Kenton D. Keilholtz, Toledo, Ohio; G. C. McFadden, Peoria, Ill.; P. S. Marshall, Oklahoma City, Okla.; Harry Miller, Olin, Iowa; Albert Todd, Owosso, Mich.; Paul Bossemeyer, Salina, Kan.; A. C. Waters, San Angelo, Texas; A. G. Smith, Wooster, Ohio.

International Relations Committee: W. B. Bashaw, chairman, Montreal, Canada; N. H. Campbell, Toronto, Canada; H. N. Sager, Chicago, Ill.; H. W. Richardson, Kingston, Ont.; H. E. Botsford, Detroit, Mich.; H. J. Atwood, Duluth, Minn.

Milling and Grain Joint Committee: Frank Kell, chairman, Wichita Falls, Texas; Chas. Jenkins, Noblesville, Ind.; Chas. G. Ireys, Minneapolis, Minn.; J. B. McLemore, Nashville, Tenn.; H. I. Baldwin, Decatur, Ill.

Committee on Rejected Applications: F. G. Horner, chairman, Lawrenceville, Ill.; S. C. Armstrong, Seattle, Wash.; E. H. Beer, Baltimore, Md.

BRIEF MENTION

MONTANA farm crops at harvest time were worth \$11,000,000 more than last year, while recent freight adjustments have added still more to the value.

ONLY 64 per cent of the corn crop planted grows. These figures, given by the Department of Agriculture, cover a period of 13 years, and the losses are due chiefly to weather conditions, defective seed, plant disease, insect and animal pests.

THE wheat crop of Jugo-Slavia is estimated to be about 7 per cent less than that of 1921. The corn crop forecast is about 22 per cent less than the crop of last year. The barley and oats crops are also smaller than for 1921 but the rye is greater.

THE Canadian wheat crop averaged 17.25 bushels per acre this year, which is next to the record. On this average the total wheat crop is 388,773,000 bushels, or 29 per cent greater than the yield last year, and only 5,000,000 bushels under the 1915 record crop.

THROUGHOUT the West elevators report that farmers are piling their grain on the ground because the houses are full and cars cannot be secured. The car situation has now improved slightly, however, although the burden has been relieved only to a small extent.

THE system of Bulgarian grain elevators for which bids were asked some time ago, depends on the successful contractor placing bonds abroad for 2,000,000 pounds sterling. The bonds will be secured by the elevators and will be amortized within 20 years. Possibly they will be guaranteed by the Government.

GRAIN TRADE PATENTS

Bearing Date of July 25, 1922

Grain door.—Roy E. Smith, Iuka, Ill. Filed July 10, 1919. No. 1,423,040.

Grain separator.—Richard L. Owens, Minneapolis, Minn. Filed December 12, 1917. Renewed April 17, 1922. No. 1,422,299.

Grain elevator.—Orlando Homer Brown, Victoria, B. C., Canada. Filed February 24, 1921. No. 1,422,534.

Automatic scale.—Hugh Cameron, Newark, N. J., assignor to Robert D. Kent, Passaic, N. J. Filed November 15, 1919. No. 1,422,664.

Bearing Date of August 1, 1922

Self-training belt conveyor.—Myron A. Kendall, Aurora, Ill., assignor to Stephens-Adamson Manufacturing Company, Aurora, Ill., a corporation of Illinois. Filed July 8, 1921. No. 1,423,528.

Grinding plate.—Harry Buckley and Ray Buckley, Louisville, Ky. Original application filed April 8, 1921. Divided and this application filed July 13, 1921. No. 1,424,615.

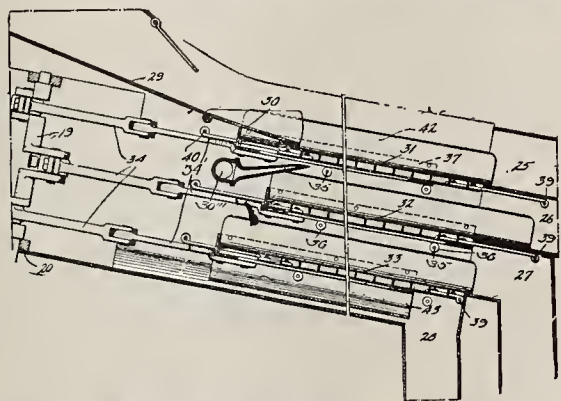
Grain door.—John McMurdo, Winnipeg, Man. Canada. Filed March 14, 1921. No. 1,424,206.

Bearing Date of August 15, 1922

Automatic weighing scale.—Henry R. Standefer, Melvin, Texas. Filed August 30, 1920. No. 1,425,911.

Grain cleaner.—Friend Fowler, Moose Jaw, Sask., Canada. Filed April 20, 1920. No. 1,426,270. See cut.

Claim: A grain separator including a chute, supporting means positioned within said chute, carriages



movably resting upon said supporting means, said carriages each comprising angle irons and screens extending between said angle irons, a combing de-

vice arranged below each of said screens, supporting means interposed between said combing device and the upper face of the lowermost arm of each of said angle irons, and means for reciprocating each of said carriages.

Bearing Date of August 22, 1922

Weighing tank for automatic weighing machines.—Baltus Boulogne, Soerabaia, Java, Dutch East Indies. Filed August 17, 1921. No. 1,426,709.

Apparatus for drying and sterilizing cereals.—Anton Huhn, Minneapolis, Minn. Filed August 13, 1917. Renewed January 14, 1922. No. 1,426,385.

Bearing Date of August 29, 1922

Feeder.—Leslie I. Ziegler, Indianapolis, Ind., assignor to Nordyke & Marmon Company, Indianapolis, Ind., a corporation of Indiana. Filed August 12, 1920. No. 1,427,341.

Dust collector.—William Thomas Blaney, Peterboro, Ont., Canada. Filed April 10, 1922. No. 1,427,674.

Composition of matter produced from corn cobs.—Paul Gruber and Harrison C. Bashioum, Pittsburgh, Pa., said Bashioum assignor to said Gruber. Filed October 18, 1920. No. 1,427,378.

Bearing Date of September 12, 1922

Dust collector.—Adolph John Wilharm, Ashland, Wis. Filed October 13, 1920. No. 1,429,006.

Grain separator.—Patrick H. Vaughn, Morris, Minn. Filed March 1, 1920. No. 1,428,926.

Grain chute.—Harry W. Davison, Kansas City, Mo., assignor of one-half to James C. Patrick, Kansas City, Mo. Filed February 18, 1921. No. 1,428,763. See cut.

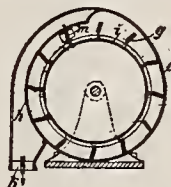
Bearing Date of September 19, 1922

Belt conveyor tripper.—Oscar B. Hanson, Tiffin, Ohio. Filed April 19, 1919. No. 1,429,732.

Feed mixer.—John Gale Steele, Amarillo, Texas. Filed February 7, 1921. No. 1,429,790.

Disk mill.—Stefan Steinmetz, Berlin, Germany. Filed August 26, 1921. No. 1,429,258. See cut.

Claim: A disk mill for grinding grain, meal, bran, and the like, embodying throw wings on the outer



circumference of one of the turning mill disks, said wings being tangentially arranged and extending across both disks, a spirally formed grinding chamber enclosing the wings and provided with a curved sieve, so that the wings lift the ground material leaving the disks and throw it against the sieve.

are called on to send such cars to western roads at once.

The order was issued to relieve the car shortage in the West and meet the demands of agriculturists, farmers and other shippers for greater transportation facilities.

The order further provides that loading of all box cars belonging to western roads shall be immediately discontinued in the territory east of Chicago, Peoria and St. Louis and west of Grand Rapids, Detroit, Toledo, Cleveland, Youngstown, Pittsburgh and Wheeling, and these cars must be moved west empty.

The drastic order was promulgated to aid in the movement of the tremendous business now being offered to the railroads in the West. Use of the box cars for local loading is ordered discontinued throughout a large region, and is allowed only where cars can be loaded, consigned to Chicago, Peoria, St. Louis or points beyond.

SOUTH DAKOTA GRAIN TO SIOUX CITY

In a supplemental report on No. 11140, Board of Railroad Commissioners of the State of South Dakota vs. Director-General, Santa Fe et al. the Commission has modified its former findings in 73 I. C. C. 347, by excepting therefrom rates to Sioux City, Iowa, on grain and grain products from eastern South Dakota.

In the original report, the Commission prescribed certain maximum rates as just, reasonable and non-prejudicial for application on grain and grain products from points in South Dakota east of the Missouri River, to all points in Iowa. No order was entered, but the Commission said that defendants were expected to publish and file tariffs in conformity with the findings.

ADVANCE IN RATES

The rates on grain and grain products, carloads from Kansas City, Mo., via Wabash Railway, Chicago, and C. & N. W. Railway to Fond du Lac, Wisconsin, Green Bay, Wisconsin, and points taking same rates as shown in Supplement 3 to Wabash Railway, tariff I. C. C. 5370, effective November 3, 1922, will be increased to following basis: Wheat and articles taking wheat rates 25.5 cents, corn and articles taking corn rates 23.5 cents. This is an advance of 2.5 cents and places the Wabash Railway on same basis as other lines that publish through rates from Kansas City to above named territory.

The reshipping rates on grain and grain products from Chicago to St. Louis, Mo., have also been increased from 11.5 cents on wheat, etc., and 10.5 cents on corn and products, to 12 cents on all grains and grain products, effective November 6, 1922.

EMERGENCY FEED RATES

The Commission, in special permission No. 60861, has authorized the Rock Island to supplement its I. C. C. Nos. C-10857 and C-10869 to provide a reduction of 50 per cent under present rates on live stock feed from points in Western Trunk Line territory to destinations in New Mexico. Agent Countiss also received authority, under special permission No. 60862, to publish a similar reduction in supplements to his I. C. C. Nos. 1087 and 1088 from Phoenix and intermediate points on the Santa Fe to destinations in New Mexico on the Santa Fe. The rates in each case are to be established on one day's notice and are to expire December 31, 1922. The Commission also authorized the Rock Island to depart from the fourth section in establishing rates. The rates were authorized so as to enable cattle owners to get feed to their starving herds in New Mexico. On account of drouth there are no other pastures to which the cattle could be taken.

INVESTIGATION AND SUSPENSION DOCKET
1585

Some time ago the various carriers operating between the Twin Cities and Lake Superior ports published tariffs which permitted the use of proportional rates to Duluth and Superior without the surrender of inbound billing.

The tariffs so published were suspended under "Investigation and Suspension Docket No. 1585" and in a decision written by Commissioner Campbell, opinion 7890, 73, I. C. C. 455-8, the Commission holds that the carriers have not justified their proposal to waive the surrender of inbound freight bills as a condition precedent to the application on grain originating beyond Minneapolis, St. Paul, and Minn. Transfer of the proportional rates, from those points to Duluth, Superior, Superior East End and Central Avenue, and to accept in lieu thereof certification that, the grain is to be forwarded by boat, and the tariffs are to be cancelled on or before November 15.

REPORTS from the Port Arthur Chamber of Commerce and Shipping of Port Arthur, Texas, state that grain clearances from that port for October were 796,000 bushels compared with none in 1921 and 465,900 bushel in October, 1920.

TRANSPORTATION

MINNESOTA RATES UPHELD

Without writing any opinions, the U. S. Supreme Court, October 16, affirmed the Federal District Court of Minnesota, in Nos. 48, 49 and 50, cases brought by Minnesota state officials against the Northern Pacific, the Chicago & North Western and other northwestern lines, as the result of the Interstate Commerce Commission bringing intrastate fares and charges in Minnesota up to the level prescribed in Ex Parte 74. The Court, in sustaining the lower court, which had found against the state officials, merely referred to its decision in the Wisconsin intrastate passenger fare case, wherein it upheld the Federal Commission.

EX-LAKE GRAIN REDUCTION DENIED

The Commission has denied an application of the Illinois Central for short time permission to establish a rate of 15.5 cents on ex-lake grain from Chicago to New Orleans without regard to the fourth section. The permission was desired so as to relieve congestion at Buffalo and at upper Canadian ports. Objection was made by Kansas City on the ground that the Illinois Central had not furnished cars for its own territory; and also because the rate proposed was low in comparison with 18 cents from St. Louis and 30.3 from Kansas City. Kansas City also suggested American grain interests had suffered from Canadian competition and should not now be asked to accept additional suffering to help it.

CAR CONDITION IMPROVES

Fewer freight cars are now in need of repair than at any time since March 15, 1921, according to reports from the railroads of the country to the Car Service Division of the American Railway Association. On October 15 last, the latest date for which figures are available, 270,045 freight cars, or 11.9 per cent of the cars on line, were in need of repairs. This was a decrease of 21,609 cars com-

pared with the total on October 1, at which time there were 291,654, or 12.8 per cent. This also was 54,538 fewer than on July 1, the date upon which the strike of railway shopmen began.

Comparisons show that on October 15, 1921, there were 354,996 freight cars, or 15.5 per cent of the cars on line, in need of repairs. Freight cars requiring light repairs numbered 55,123 cars on October 15 last, a decrease of 5,966 compared with the total on October 1. Cars in need of heavy repairs totaled 214,922, or a decrease of 15,643 within the same period. Every district on October 15 showed a decrease, in the number of cars needing repairs, compared with the total not only on October 1, but also on July 1 last.

MONTANA RATES TO NORTHWESTERN

Rate on wheat and flour from Montana points to Seattle, Tacoma, Portland and Astoria for export. Rate will be 33½ cents from stations Billings to Hedges inclusive, 32½ cents from stations on Gilman and Pendroy branches and 32 cents from all other points Havre and west. No rates from points east of Havre.

New export tariff will carry same milling in transit as now published in domestic tariff from stations in Havre and west and in addition will permit milling or cleaning at port of export at additional charge of two and one-half cents when carrier performs service from transit house to boat, no additional for cleaning or millings at port when shipment handled by shipper from transit house to boat.

RETURN OF BOX CARS

Railroads operating east of Chicago, Peoria and St. Louis were ordered by the car service division of the American Railway Association to return immediately all box cars on their lines where the cars are owned by carriers in the northwestern, central western and southwestern districts. The carriers



INDIANA

J. A. Cole is now manager of the Farmers Elevator at Windfall, Ind. He was formerly located at Richey, Ind.

A preliminary certificate of dissolution has been filed by the Greens Fork Elevator Company of Greens Fork, Ind.

A large building in Evansville, Ind., has been purchased by the Miller Hay & Grain Company. A modern plant will be erected this fall on this site.

Harry Bannister is manager of the Grange Elevator Company's plant at Mishawaka, Ind., succeeding A. E. Castleman. Mr. Castleman is now with his brother in the Nu-Coal Yards.

The National Elevator Company has leased Elevator "B" of the Cleveland Grain Company at Indianapolis, Ind. A new work house is being erected and the house which will have a capacity of 600,000 bushels will be ready for operation the first of the year.

The elevator and grain business of John Merkert of Ora, located at Knox, Ind., has been sold by him to Ira Rinehart. The change was made November 1. Mr. Merkert has operated the house for about five years. Mr. Rinehart was formerly located at Rochester.

OHIO AND MICHIGAN

A 20,000-bushel elevator is being erected at Groveport, Ohio, by William Leyshone.

A new elevator is being erected at New Holland, Ohio, for the H. M. Crites Company.

Capitalized at \$10,000, the Almont Elevator Company has been incorporated at Almont, Mich.

A Randolph Direct Heat Drier has been installed by the Coleman Elevator Company of Coleman, Mich.

Henry Monter has purchased the elevator at Orrville, Ohio, and has rented it to F. and William Justice.

W. F. Bradford is now manager of the elevator of the Breckenridge Bean Grain Company at Wheeler, Mich.

The grain, seed and wool business of J. L. Moloney & Co., operating at Hudson, Mich., has been sold to the Hudson Milling Company.

The house and business of the East Michigan Farmers Elevator Company at Omer, Mich., has been taken over by B. S. Holland and William Topp.

The elevator of the Jewell Grain Company at Jewell, Ohio, which burned on October 9 is to be rebuilt. It will be erected on the site of the old house.

Henry Martin has sold his elevator at Columbus Grove, Ohio, to John Aikenberry of Grover Hill. Mr. Martin has been operating the elevator for five years.

J. W. Deckman is now manager of the Clover Leaf Grain Company at Pleasant Bend, Ohio. He was formerly with the Pleasant Bend Grain Company.

The elevator of the Onsted Co-operative Company at Onsted, Mich., has been leased by the Cutler-Dickerson Company of Adrian. Lester Winter is manager.

Capitalized at \$30,000, the Flushing Elevator Company has been incorporated at Flushing, Mich. H. E. Charterton, A. Phillips and A. H. Madsen are interested.

The interest of Charles Ayres in J. V. Metzger & Co. of Wilmington, Ohio, hay and grain dealers, has been purchased by Henry Metzger, who has changed its name to J. V. Metzger & Son.

The Gratz Grain & Milling Company at Tecumseh, Mich., has purchased the property at Adrian, Mich., from the Universal Stores Corporation and will open a grain receiving station and feed mill.

The business of the Myers-Marshall Grain Company at Jackson, Mich., has been closed down. Messrs. Myers and Marshall are now connected with the Chatterton & Son in charge of its Lansing grain department.

The Steel Elevator at Toledo, Ohio, has been leased from A. M. Donovan of the Toledo Fuel Company by the Kasco Mills, Inc., of Waverly, N. Y. The plant includes a mill, three steel storage tanks and a frame warehouse occupying an acre of ground. Plans for improvements of the property

include a seven-story mill which will house the machinery for manufacturing a complete line of horse, dairy and poultry feeds.

D. A. Bricker has resigned as manager of the Equity Elevator at Convoy, Ohio, and is succeeded by Mr. Stemen of Middlepoint.

IOWA

A new air grain dump has been installed in the Farmers Elevator at Meriden, Iowa.

Capitalized at \$30,000, the Farmers Elevator Company has been incorporated at Badger, Iowa.

Considerable remodeling has been done to the elevator of the Farmers Elevator Company at Garner, Iowa.

A new building has been completed at the Clark Brown Elevator at Rippey, Iowa, and is ready for the installation of machinery.

A new elevator is to be built at Randolph, Iowa, for the Farmers Elevator Company. It replaces the one which was burned.

An addition is to be built to the plant of the Farmers Elevator Company at Webster City, Iowa, next spring at a cost of \$40,000.

The Gladbrook Grain & Lumber Company has completed a new warehouse at Gladbrook, Iowa, which will be used for feed storage.

Extensive improvements and repairs are being made to the plant of the Farmers Co-operative Elevator Company of Iowa Falls, Iowa.

L. R. Goff succeeds A. Beatty as manager of the Farmers Elevator Company at Clearfield, Iowa. Mr. Goff was formerly at Fontanelle.

The Legrand Elevator Company of Legrand, Iowa, has built an addition to its elevator giving the house a total capacity of 13,000 bushels.

The elevator of the Reimer Bros. at Danbury, Iowa, has been remodeled and operations have been resumed after an idleness of two months' duration.

H. O. Holley has resigned as manager of the Farmers Elevator Company at Hawkeye, Iowa. He has gone into partnership with Gilchrist & Co., in the grain, flour and coal business at Bristow, Iowa.

A. K. Anderson is president and R. S. Leibrand is secretary of the Farmers Co-operative Company which has been organized at Lakota (Buffalo Center p. o.), Iowa, to deal in grain and livestock.

C. H. McDermott has resigned as assistant manager of the Farmers Co-operative Elevator at Anita, Iowa, and has become resident manager of the Farmers Co-operative Elevator Company at Fontanelle, Iowa.

A new addition is to be built to the elevator of the Farmers Elevator Company at Williams, Iowa. The new house will cost about \$40,000 and is of tile construction. It will have capacity of 40,000, making the total capacity 60,000 bushels.

ILLINOIS

A grain elevator of 60,000 bushels' capacity is being erected at Malta, Ill., by D. T. Peterson.

Repairs and remodeling is being done to the elevator of the S. C. Bartlett Company at Fairbury, Ill.

The Sullivan Grain Company has purchased the elevators of the Ledbetter & Taber at Sullivan and Bruce, Ill.

R. G. Mathias is succeeded as manager of the Farmers Grain Company at Dalton City, Ill., by John Werdner.

The old elevator at Beason, Ill., which has been standing there for 40 years, has been sold and will be torn down.

George W. Graham purchased at public auction the Richards Elevator at Streator, Ill., for the consideration of \$21,000.

A new elevator is to be built at South Clinton, Ill., by Ed. Hendricks, who has been in the grain business for many years.

The Guy Parks Elevator at Creston, Ill., has been purchased by Ralph Lewis and H. W. Colwill, who will operate as Lewis & Colwill.

The grain and coal business of the Consolidated Grain Company at Cissna Park, Ill., has been purchased by the Davis Bros. of Galesburg, Ill.

Stockholders and creditors of the Niantic Farmers Co-operative Company at Niantic, Ill., have

formed a new organization, the Niantic Farmers Grain Company and have purchased the elevator of the old firm.

A cash grain commission business is to be conducted at Mendota, Ill., by Thomas E. Cavanagh. He was formerly manager of Moore & Cavanagh.

Remodeling is being done to the elevator at Brownwood (mail Hopedale), Ill., owned by the Farmers Elevator Company. The elevator is also being covered with iron siding.

E. G. Coon of Lovington, Ill., is going to build a grain elevator at Kemp, Ill., where the Munson & Moss Elevator burned in September. Mr. Coon also owns an elevator at Block, Ill.

An interest in the Fairmount Grain Elevator Company at Fairmount, Ill., has been purchased by A. W. Cast of Danville. He will manage the elevator succeeding Z. A. Terry.

Considerable stock in the Windsor Grain Company, Windsor, Ill., has been purchased by C. H. Sexon. Its capital stock is \$40,000. Mr. Wallace retains his hay and seed business.

The interest of R. E. Bowers in the grain firm at Williamsburg, Ill., has been purchased by Elvin Atherton. They will operate as Bowers & Atherton and will handle grain and coal.

A new grain elevator is to be erected at Dwight, Ill., for the Farmers Co-operative Elevator Company replacing the one destroyed by fire. The new elevator will have capacity for 40,000 bushels.

The house of the Farmers Elevator Company at Elizabethtown, Ill., has been purchased by John P. Fitzgibbon and Harvey Herrin. The machinery is being overhauled and the elevator is being repainted.

WESTERN

A new elevator is to be erected at Bristol, Colo., for J. W. Lahart of Sedgwick.

A new elevator is to be built at Soda Springs, Idaho, for the Idaho Grain Company.

H. H. Thorpe is manager of the Farmers Elevator Company located at Froid, Mont.

Capitalized at \$10,000, the Elkhead Elevator Company has been incorporated at Craig, Colo.

P. H. Murphy is now in charge of the Montana Elevator Company's elevator at White Sulphur, Springs, Mont.

The capacity of the Crowther Bros.' elevator at Malad, Idaho, has been increased by the erection of a 40,000-bushel addition.

The Salt Lake & Jordan Milling & Elevator Company of Sandy, Utah, has installed new grain cleaning machinery and other equipment.

A new elevator is being erected at Ingomar, Mont., for the Yellowstone Elevator Company which operates at Forsyth and Sumatra.

The Northern Grain & Warehouse Company, which operates 50 elevators in the State of Montana, has opened another elevator at Wibaux, Mont.

The Northwestern Wheat Growers Association has practically decided upon the construction of a 250,000-bushel elevator at Baker, Mont., next year.

H. E. Benjamin is now in charge of the Equity Co-operative Elevator located at Shelby, Mont. Mr. Benjamin is also manager of the Benjamin Mercantile Company.

The new 42,000-bushel elevator of the Colorado Milling & Elevator Company at Holyoke, Colo., has been completed and put into operation. G. E. Schoonover is manager.

A local farmers organization at Melstone, Mont., has leased the elevator at that place which J. H. Jesser has been conducting under the name of the Melstone Grain Company.

The Whittier, Calif., branch of the Globe Mills has been purchased by Fred H. Williams, who has been for four years manager of the Globe Grain & Milling Company there. He will carry a large stock of hay, grain feed and poultry supplies.

R. S. McCarl and W. L. Wilson have gone into partnership at Portland Ore., and will operate as the McCarl & Wilson Grain Company. The new firm will handle everything in the grain and milling line. Mr. McCarl has been for four years connected with the Portland Flouring Mills Company; Mr. Wilson has been in the grain business for 12 years, he formerly represented Gordan T. Shaw,

but for several months has been in business for himself. The new company is located in the Board of Trade Building.

The Utah-Idaho Brokerage Company of Salt Lake, Utah, has changed its name to that of the Utah-Idaho Flour & Grain Company and increased its capital stock to \$100,000 from \$25,000.

The Montana Wheat Growers Association has leased the elevator at Melstone, Mont. Virgil Jennings is president; F. Hamilton, vice-president and Carl Weeks, secretary and treasurer.

A new elevator is to be erected at Idaho Falls, Idaho, for the Idaho Falls Mill & Elevator Company replacing the one which burned a short time ago. G. G. Wright is president of the company.

MISSOURI, KANSAS AND NEBRASKA

John H. Herrold has resigned as manager of the Farmers Elevator at Tamora, Neb.

The Farmers Union has its new elevator at Abdal, Neb., open and ready for business.

F. J. Walton has resigned as manager of the Farmers Elevator located at Fairview, Mo.

A new elevator is to be erected at Valentine, Neb., for the Farmers Union Elevator Company.

The Grange Elevator at Gibbon, Neb., is now owned by C. W. Leonard and Jay Graham of Kearney.

The two elevators at Tampa, Kan., are now being operated by the Farmers Co-operative Association.

The bins at the elevator of J. E. Palmer at Norton, Kan., are to be remodeled and new machinery installed.

Fred Obermeyer is succeeded as manager of the Farmers Union Elevator at Cook, Neb., by Alfred Vandeberg.

The Farmers Union Elevator Company has been incorporated at Sacramento, Neb. Oscar Erickson is manager.

The contract has been let by the A. B. Wilson Grain Company of Nebraska City, Neb., for the erection of a new elevator.

P. Sorenson is succeeded by Soren P. Jenson, Jr., as manager of the Farmers Grain & Supply Company, located at Boelus, Neb.

Joseph Yates is succeeded as manager of the elevator of the Farmers Union Co-operative Company at Ohio, Neb., by John Ahern.

The elevator of the Doster Grain Company at Caldwell, Kan., has been leased to the Hunter Milling Company of Wellington, Kan.

The Union Farmers Elevator Company at Union, Neb., is to be operated by W. H. Harding, of Bethany, as manager. He succeeds L. G. Todd.

John Mallen has purchased the elevator at Plattsburgh, Mo., from the Seward Grain Company. The firm will continue the business.

Mr. Myers is succeeded as manager of the Farmers Union Co-operative Grain & Supply Company at Susank (Hoisington p. o.), Kan., by C. W. Sunquist.

The elevator of the Florence Grain & Coal Company at Florence, Kan., has been leased by W. T. Hacker and will be operated as the Hacker Elevator.

At Norfolk, Neb., the Norfolk Grain Corporation has been incorporated to conduct a general brokerage business in all kinds of grain. T. R. Smith is manager.

The old Fields & Slaughter Elevator at Allen, Neb., which has been owned by the Fay J. Clough Elevator Company is now under the management of R. F. Heliker.

The contract has been let by the Missouri, Kansas and Texas Railroad to James Stewart & Co., for a 100,000-bushel elevator at Glen Parks Yard, Kansas City, Mo.

The Dundee Farmers Grain & Supply Company of Dundee, Kan., has changed its name and incorporated. It will operate, capitalized at \$25,000, as the Dundee Farmers Grain Company.

The Larabee Flour Mills Corporation of Kansas City, Mo., is interested in the erection of a grain elevator at Derby, Kan., costing \$5,000. The company is also erecting an elevator at Clearwater, Kan.

The Farmers Grain & Supply Company of Hastings has purchased the property of the Verona Grain & Lumber Company at Prosser, Neb. The company will operate the Prosser Elevator as a line elevator.

Capitalized at \$20,000, the Edgerton Elevator Company has been incorporated at Edgerton, Kan. The company, which is composed of farmers of that locality, has purchased the house and business of the Farmers Union Co-operative Business Association, which has now surrendered its charter.

George Anderson is succeeded as manager of the Lord Mill & Elevator at Emporia, Kan. by H. C. Pargett of Cawker City, Kan. W. F. Pearsall who has been acting manager of the property since September 1 when Mr. Anderson resigned will be

assistant manager. Mr. Pargett has been managing elevators at Beloit and Cawker City for the Mitchell County Farmers Union.

George E. Gless, J. E. Higgins, George G. McVicker and Edward Guynan have incorporated at Rogers, Neb., as the Farmers Cooperative Grain Company. Its capital stock is \$25,000.

The elevator of the Kansas Flour Mills Company at Raymond, Kan., has been purchased by the Davis Grain Company of Hutchinson, Kan. Thomas O'Neill is manager. The Davis Company sold its elevator at Santanta, Kan.

An addition is to be built to the house of the Nebraska Consolidated Mills Company of Omaha, Neb., with capacity of 100,000 bushels. The contract has been let for the structure which will include four tanks each about 80 feet in height.

The Kansas Terminal Elevator Company has been incorporated at Topeka, Kan., capitalized at \$100,000. E. J. Smiley, F. D. Speery, M. W. Hardman, A. G. Hardman, C. L. Hardman, F. M. Beverly, F. E. Michaels and J. F. Jones are interested.

CANADA

Elevator "D", the property of the Canadian Pacific Railway Company at Moose Jaw, Sask., is now to be operated under a long term lease by the Consolidated Elevator Company.

The city of Vancouver, B. C., is interested in the erection of a new grain elevator of from 500,000 to 750,000 bushels' capacity there next year. The complete plans have not as yet been laid.

The Matheson-Lindsay Grain Company, Ltd., has been registered at Regina, Sask., under the Companies Act, with capitalization of \$500,000. The company's head office is at Winnipeg, Man.

A new elevator is being erected at Sylvan Lake, Alta., for the Terwilliger Grain Company. A Calgary company has the contract. An office building, engine room and coal shed will also be constructed.

The Davidson & Smith Elevator at Fort William, Ont., is to be either purchased or leased by the Inland Seas Grain Company, J. P. Jones is associated with the company in advisory capacity.

The new elevator and seed house of Hogg & Lytle, grain merchants of Winnipeg, Man., at De Winter (no p. o.) has been completed. It is a modern house with a capacity of between 40,000 and 50,000 bushels. Two of the latest modern type of Monitor machines have been installed for cleaning grain and seeds.

The new private elevator of Parrish & Heimbecker at Port Arthur, Ont., has been opened. While planned for an ultimate capacity of 1,000,000 bushels, the first unit will have capacity of 300,000 bushels. The new elevator is complete and up-to-date in every feature. It comprises a working-house 42x46, storing tank annex 45x69, drier and boiler house 28 feet long and a track house. Each of the tanks have capacity of 25,000 bushels. The workinghouse has two elevator legs with provision for a third; the elevating capacity is 30,000 bushels per hour. James Stewart & Co. had charge of the construction work.

It has been found necessary to make additions to the Dominion Government Elevator at Vancouver, B. C., at an approximate cost of \$85,000. The contract has been let for a grain drying plant and boiler house and the work has already been commenced in preparing the site. Both the grain drying plant proper, as well as the detached boiler house, which will furnish the heating are to be of reinforced concrete construction. The grain drier will be about 30x60 feet and 90 feet high, to allow the gravity handling of the grain. It is to be built alongside the present elevator building. The boiler house will be 30x75 feet in size and one story high, also of reinforced concrete construction with a corrugated iron roof. The additions are to be rushed to completion as soon as possible.

SOUTHERN AND SOUTHWESTERN

A grain and feed business is to be conducted at Seymour, Texas, by W. W. McDuff.

A grain and cotton business has been established at Fort Worth, Texas, by McCauley & Co.

The Austin Mill & Grain Company of Austin, Texas, has increased its capital stock from \$75,000 to \$150,000.

A grain, feed and seed business has been opened at Mission, Texas, by H. B. Mitchell and F. J. Mitchell.

A building is being erected at Keystone, Okla., by George Applegate to be occupied as a grain and feed store.

The Farmers Elevator Company has been incorporated at Electra, Texas, with a capital stock of \$80,000. The incorporators are I. K. Williams, T. H. Parmley, R. P. Prince and others.

A grain and feed warehouse is being built at Bard (no p. o.), Ark., for the House-Jones Mill Company of Paragould, Ark., replacing the one which burned several months ago.

The grain and grocery brokerage business at Foley, Ala., of the South Baldwin Wholesale Com-

pany is to be conducted by Walter S. Richardson, formerly in the wholesale grain business at Pensacola, Fla.

The property of the Farmers Mill & Elevator Company at Kingfisher, Okla., is to be operated by W. W. Deck.

The business of the Lampass Grain Company of Lampass, Texas, has been sold to the Central Produce Company.

The Bird-Winslow Grain Company of Enid, Okla., has been succeeded in business by the Henry Bird Grain Company.

H. M. Joyce succeeds R. C. Murrell as manager of the Farmers Co-operative Grain & Cotton Company of Frederick, Okla.

The capital stock of the Farmers Grain & Supply Company of Follett, Texas, has been increased from \$10,000 to \$18,000.

The Schuhart Grain & Elevator Company of Dalhart, Texas, has purchased the property of the Dalhart Mill & Elevator Company.

The property of the City Flour & Grain Company at Spartanburg, S. C., has been purchased by Claude Cole and M. S. Christman.

The grain elevator of the Kansas City Southern at Port Arthur, Texas, is to be doubled in capacity. Its capacity at present is 450,000 bushels.

The Yoakum Mill & Elevator Company of Yoakum, Texas, is erecting a new elevator and warehouse. J. W. Walker will be manager.

A new grain elevator at Waynesboro, Ga., has been completed with Sidney Bates in charge. This replaces the elevator which burned early this year.

The interest of B. F. Montgomery in the Tahoka Coal & Grain Company at Tahoka, Texas, has been sold by him. Mr. Montgomery has moved to Carlsbad, N. M.

The Lang Grain Company of Oklahoma City, Okla., has installed a millfeed and seed department with A. B. Rickert in charge. Seed is being handled in wholesale lots.

The Quality Mills have been incorporated at Austin, Texas, capitalized at \$150,000. The company will operate grain elevators, storage warehouses and mills. The incorporators are E. H. Perry, D. C. Reed and W. H. Dodson, all of Austin.

EASTERN

Oscar Holway Company's grain business at Bath, Maine, has been purchased by the Trott Bros.

The Gerald Bros. are erecting a 60x60 foot addition to its grain storage house at Clinton, Maine.

Capitalized at \$10,000, the A. E. Thurber Elevator Company has been incorporated at Brooklyn, N. Y.

The grain elevator of Hosey & Moon at Rochester, N. Y., is being equipped with cleaning apparatus and carriers.

A grain storage house three stories in height has been completed at Gardiner, Maine, for the Gray-Hildreth Company.

The Rockingham Grain & Flour Company of Portsmouth, N. H., will rebuild its house at once which was badly damaged by fire recently.

A syndicate represented by Raymond T. Fisje of Buffalo, N. Y., has bought the Evans Elevator at Buffalo, N. Y., from George E. Pierce and has opened it for business. Its capacity is 350,000 bushels.

F. J. Brandt & Co., has been formed at Lansdale, Pa., by F. J. Brandt for the past 15 years with C. W. Wagar & Co., of Philadelphia, Pa., and Charles N. Reichley. They will deal in wholesale grain and millfeeds.

The Bohemian Hop & Malt Company, Inc., has been incorporated at Manhattan, N. Y., to deal in grain, flour and cereal products. Its capital stock is \$5,000. The incorporators are: H. J. Harding, O. Van Bernuth, Jr., and Joachin Altuna.

The contract has been awarded the John S. Metcalf Company of Chicago by the Baltimore & Ohio Railroad Company for the preparation of plans and specifications of a new grain elevator at Locust Point, Md., of 3,000,000 bushels' capacity, replacing the elevators which burned on July 2.

The Pennsylvania Railroad has its new \$5,500,000 grain elevator annex at Baltimore, Md., completed and ready for operation. This addition will increase its grain handling capacity of 4,250,000 bushels. Four ships may be loaded at one time at a rate of 120,000 bushels per hour; 40 cars can be unloaded per hour.

The New England Port Development program of the Maritime Association of the Boston Chamber of Commerce will be given impetus by an important conference to be held with New York interests the coming week. For some time the Association has been working with interests in Troy, N. Y., with the idea of having the State of New York establish a terminal for the barge canal on an extensive scale, including a grain elevator and storage warehouse at Troy or some point nearby that would be tributary to the New England railroads.

Through the co-operation of the Troy Chamber of Commerce, a meeting with representatives of financial, industrial, commercial and transportation interests was held on November 9, at Troy, N. Y.

I. F. Potter, William C. Miller and G. W. Potter have incorporated at Johnstown, N. Y., as the Potter-Miller Company. The firm will deal in grain and cereal products. Its capital stock is \$30,000.

A new wholesale grain and feed firm has been started at Buffalo, N. Y., by Taylor & Shaw, Inc. The company is incorporated for \$100,000. The members are Gene Taylor and H. C. Shaw. Mr. Taylor was in the local feed business for years; and Mr. Shaw was for some time local representative of Taylor & Bournique Company.

MINNESOTA AND WISCONSIN

Operations will be started soon in the Farmers Elevator at Donnelly, Minn.

Repairing is being done to the elevator of the National Elevator Company at Glyndon, Minn.

A grain and stock transfer business has been opened at Red Wing, Minn., by Clarence Chellberg.

A notice of dissolution has been filed by the Cochran Grain & Commission Company of Cochrane, Wis.

N. P. Hansen is succeeded as grain buyer at the Atlas Elevator at Ruthon, Minn., by Lars Reinhold of Tyler.

The Farmers Co-operative Marketing Association has overhauled its elevator located at East Grand Forks, Minn.

The elevator of the Farmers Elevator Company at Belview, Minn., has been reopened with A. Anderson in charge.

Operations have been started in the new Commander Elevator at Mankato, Minn. W. L. Snyder is buyer for the company.

Operations are not to be resumed immediately in the Independent Elevator at Litchfield, Minn., which was recently rebuilt.

The Lafayette Farmers Elevator Company of Lafayette, Minn., has renewed its charter, which had expired, for another 20 years.

The Farmers Elevator at Blair, Wis., has been leased by F. E. Green. He will put in a grinding mill and deal in hay, grain, etc.

A fireproof grain elevator with capacity of 13,500 bushels is under course of construction at Sun Prairie, Wis. by Chase & Son. It will replace the one which burned last winter.

T. F. Garry has given up his position as manager of the Farmers Elevator at Bricelyn, Minn., and has moved to Eagle Grove, Iowa. He is succeeded by C. L. Johns of Sheldon, Iowa.

A large elevator is to be erected at Wrightstown, Wis., for the A. G. Wells Company. It will be erected between the present elevator and warehouse. The contract has been awarded.

The new elevator of the Farmers Elevator Company at Wells, Minn., is about ready for operation. Repairs were made to the elevator following the fire which occurred in the plant a short time ago.

Capitalized at \$50,000, the Owatonna Farmers Elevator & Mercantile Company has been incorporated at Owatonna, Minn. F. W. Adams, A. P. Bartsch, George Parrott, John Hartle are among those interested.

The interest of Edward A. Oie in the Oie-Holcomb-Oie Company at Virginia, Minn., has been purchased by Henry Oie and George V. Holcomb. They will operate as the Virginia Hay & Grain Company.

John W. Simon and Hugh M. Ferguson have incorporated at Sturgeon Bay, Wis., as the Northern Grain Company, capitalized at \$10,000. The company will conduct a grain commission and elevator business.

The elevator and business of the Brandon Farmers & Merchants Union Elevator Company at Brandon, Minn., has been sold to the Farmers Elevator Company. The Farmers & Merchants Company has gone out of business.

To operate a warehouse for storing grain, merchandise, etc., the Meadowlands Warehouse & Produce Company has been incorporated at Meadowlands, Minn. Its capital stock is \$50,000. John Roth, Charles Olson, Max Schleinitz are the incorporators.

A complete feed grinding equipment has been installed in the elevator at Dodge Center, Minn., which will be operated under the management of Walter H. Abbott. The mill is operated by two 20-horsepower motors and consists of two 22-inch burrs.

A grain elevator and feed mill is under construction at Rhinelander, Wis., for the Northern Hay & Grain Company. It will be modern throughout and operated by electricity. The feed mill will have a daily capacity of 20 tons; the elevator will have a capacity of 6,000 bushels.

The Farmers Grain & Supply Company has been incorporated at Currie, Minn., and will handle in

addition to grain and seeds, flour, feed, salt, coal, wood and other supplies. John Ruppert is president. The company has taken over the property of the defunct farmers company.

The elevator at Brownsdale, Minn., formerly owned by George A. Peterson has been purchased by C. M. Syck and the Hunting Elevator Company. They will now operate both the Peterson Elevator and the Hunting elevator and will also handle a full line of feeds, flour, salt, etc.

THE DAKOTAS

A grain storage house is being erected at Onida, S. D., for J. L. Nolt.

Neupin & Kusler have purchased the Farmers Elevator at Havelock, N. D.

The Dodge Elevator office and engine room at Towner, N. D., has been completed.

Fred Weist is now manager of the Equity Exchange Elevator at Richardton, N. D.

The elevator of the Casselton Elevator Company at Casselton, N. D., is being repaired.

The Farmers Grain & Lumber Company is to erect a storage house at Altamont, S. D.

The Mullaney Elevator at Vermilion, S. D., which burned during October, is being rebuilt.

The Farmers elevator at Pillsbury, N. D., has been completed and is ready for business.

A new elevator is to be erected at Sherman, S. D., by the Farmers Elevator Company.

The elevator of the Rapid River Milling Company at Sturgis, S. D., has been opened for business.

A new 35,000-bushel elevator is to be erected at Morristown, S. D., for the Lee Elevator Company.

The Great Western Elevator at Hatton, N. D., has been purchased by the Dean & Osling Company.

The H. W. Wormer Grain Company of Tyer, N. D., has equipped its elevator with a new leg and feed grinder.

The old Lee Elevator at Gladstone, N. D., has been reopened for business. It has a capacity of 20,000 bushels.

G. M. Hagne is succeeded as manager of the Eagle Butte Equity Exchange at Eagle Butte, N. D., by H. A. Jahnle.

A grain bin with capacity for 35,000 bushels is being erected by the McLaughlin Equity Exchange of McLaughlin, S. D. The house will have a ca-

capacity of 75,000 bushels when this addition is completed.

John Kingdon of Hitchcock has leased the house of the Farmers Elevator Company at Spottswood (Tulare p. o.), S. D.

Business operations have been resumed in the National Elevator at White Rock, S. D., with Mack Martenson manager.

The George C. Bagley Elevator Company has opened its house at Redelm, S. D., for business. A. Callen is manager.

A large bin with capacity for 25,000 bushels is to be built to the elevator of the Blum Elevator Company at Parshall, N. D.

The elevator at Starkweather, N. D., of the Farmers Grain Company, which burned not long ago, is to be rebuilt immediately.

The new building of the Farmers Elevator Company at Oacoma, S. D., has been completed and is ready to receive grain.

The Ed Lindgren Elevator at Frankfort, S. D., has been purchased by the owners of the James Valley Elevator Company.

An annex of 25,000 bushels' capacity is to be erected to the elevator of the Minnekota Elevator Company at Parshall, N. D.

The P. V. Elevator at Wolford, N. D., has been leased by the Cargill Elevator, which has repaired it and put it into operation.

The Thorpe Elevator at Sentinel Butte, N. D., has been rented by the Cargill Elevator Company. W. A. Hart will be in charge.

The wool warehouse at Hettinger, N. D., has been leased by the owners of the Equity Elevator and will be used for storing grain.

Repairs and improvements have been made to the Great Western Elevator at Great Bend, N. D. George Worner is buyer at the house.

H. Lindberg, R. E. Herseth and M. G. Blakseth have incorporated at Drayton, N. D., as the Farmers Interstate Elevator Company. Its capital stock is \$12,000.

Business men of Mahto, S. D., have organized a company to conduct a grain elevator and grain business there. J. J. Bentz of Mobridge is president and W. B. Myler is secretary.

A new elevator is to be erected at Rosebud, S. D., for the Rosebud Grain Company replacing the one which was burned during the month of October. The new building will be of fireproof construction.

OBITUARY

ANDERSON.—Aged 69 years, S. W. Anderson died at his home near Camden, Ark. He was an operator of a feed mill there. His widow and eight children survive him.

BAXTER.—On October 27, Edwin Baxter died at Fort Erie, Ont. He was a pioneer grain merchant and was a partner in firm of E. & B. Baxter and Baxter & Wyans, who were active grain operators 30 years ago.

BORCHERT.—Max P. Borchert died aged 37 years at his home in Milwaukee, Wis. He had been president of the Borchert Malting Company, but retired from business several years ago.

BROWN.—Clark R. Brown died on October 13 at his home in Hamilton, Ohio. Mr. Brown was a grain dealer there and had been connected with the Millys-Brown Company of Venice, Ohio. His widow and two sons survive him.

CODE.—J. E. Code died recently at Dundas, Minn. He was manager of the elevator there of the Northfield Farmers Co-operative Elevator Association.

COLE.—A. B. Cole died at St. Louis, Mo. recently. He was in the grain business there for 25 years and had been a member of the Grain Exchange for 44 years. At one time he was vice-president of the exchange.

CORNELL.—William R. Cornell died aged 73 years. He was a retired grain merchant and a member of the Commercial Exchange, Philadelphia, Pa.

CULVER.—Ed Culver, more familiarly known as "Big Chief" Culver of Toledo, Ohio, died recently. He started in as sampler of grain in the Toledo market 40 years ago and was appointed Chief Inspector in 1892. Further details concerning his work in the grain business are given in another portion of this issue.

FOOTE.—W. P. Foote died on November 4 at Champaign, Ill. He conducted a grain, mill and feed business there.

DUENSING.—George Duensing died on October 23 at his home in Minneapolis, Minn., where he had

been in the grain and feed business for over a quarter of a century. Mr. Duensing was a member of the Minneapolis Chamber of Commerce.

EBERLY.—Henry L. Eberly died on October 18 at his home in Altoona, Pa. He was a retired flour and feed dealer. He was 76 years old, and was a veteran of the Civil War. His widow and two daughters survive him.

GAYLORD.—Willard Simeon Gaylord died recently at Cromwell, Conn., following a long period of illness. Mr. Gaylord was for many years a prominent operator on the Chicago Board of Trade and began his business career as grain shipper from Lockport, Ill., where he was born and raised.

HAASZ.—Joseph Haasz, familiarly known as "Joe" to members of the Commercial Exchange of Philadelphia, Pa., where he had been gate keeper for 26 years, died suddenly from apoplexy on October 26. Mr. Haasz was 83 years old. His widow, two sons and a daughter survive him.

HAYS.—John Hays died recently following an operation. He was a member of the grain firm of Hays Bros., Galesville, Ill.

HUGGETT.—J. S. Huggett, a grain buyer at St. Paul, Minn., died suddenly on October 23 from heart disease. He was 60 years old.

HULL.—John P. Hull died on October 27 at a Minneapolis, Minn., hospital. He had been prominent in the grain business in the Northwest for many years. He had been traveling auditor for the Northwestern Elevator Company and had lived in Omaha, Fargo, N. D., Willmar, Minn., Sioux Falls, S. D., and Appleton, Minn. One daughter survives him.

KARSTENS.—On October 16, John C. Karstens died. He was a member of the Chicago Feed Dealers Association and was in the hay and feed business since 1870. His widow and eight children survive him.

KILLEN.—J. E. Killen died recently at Windsor, Ont. He has been traveling representative of several seed firms for many years.

MAGNER.—On October 26, Joseph Magner died.

He was associated with the firm of Scott, Magner & Miller, grain and hay dealers of San Francisco, Calif.

M'ALLISTER.—Norman McAllister died in an automobile accident recently. He was manager of the Glenfell Milling Company of Glenfell, Canada. He is survived by his widow.

McQUEEN.—Aged 63 years, A. J. McQueen died from a complication of diseases. He was a well known grain dealer operating at St. Louis Crossing, Ind. He is survived by his widow, four sons and four daughters.

MILLIKEN.—Porter J. Millikin died on October 26 at Decatur, Ill. He was president of the Union Iron Works and also president of the Beall Improvements Company.

MILLS.—C. D. Mills died following an operation. He was president of the Mills Seed Store of Jacksonville, Fla.

M'KAY.—Following an operation, John McKay died at Toronto. He was accountant at the Government Elevator at Port Colborne, Ont., for seven years.

NUTTING.—E. G. Nutting died during the first week of November at his home in Minneapolis. Mr. Nutting was president of the Humphrey Elevator

Company, inventor and founder of the Nutting Truck Company and a director of the Citizens National Bank. He was born in 1841 in Massachusetts.

PALMER.—W. T. Palmer died suddenly at Celina, Ohio. He was associated with the Palmer-Miller Grain Company, but has not been in active business for a year, owing to ill health.

STONE.—B. Frank Stone died suddenly at Mitchell, S. D., on November 5. He was a prominent grain buyer in the vicinity of Mitchell.

THOMSON.—Adam Gentles Thomson died at Montreal, Quebec, recently aged 76 years. He was one of the best known grain men of Canada. Mr. Thomson when a young man entered the grain business with James Kershaw & Co.; later he was associated with Rimmer, Gunn & Co., and with his brother as A. D. Thomson & Co. In 1909 Mr. Thomson formed a partnership with Paul B. Earle under the name of Thomson & Earle later known as the Thomson, Earle Ltd.

WILSON.—Thomas H. Wilson died after an operation for appendicitis. He was manager of the Guymon, Okla., station of the Liberal (Kan.) Elevator Company.

loss amounted to more than \$15,000; there was ample insurance on the property. The warehouse will be rebuilt.

Charleston, S. C.—The grain and hay warehouse of H. T. Foster was damaged by fire on October 15. The loss on hay and grain in the warehouse amounted to about \$5,000.

Bad Axe, Mich.—On October 13 the elevator of the Bad Axe Grain Company was damaged by fire which originated from some unknown cause. A small damage was sustained.

Sparta, Wis.—One of the line elevators of the Northern Milling Company of Sparta, Wis., burned on October 25. The cause of the blaze was attributed to locomotive sparks.

Vermilion, S. D.—On October 15 fire destroyed partly the Truax Elevator and several thousand bushels of grain. The damage, amounting to \$3,000, is partly covered by insurance.

Minneapolis, Minn.—The grain elevator of the Fruen Cereal Company adjoining the company's mill was burned on October 31. The loss included 20,000 bushels of grain in storage.

Dundee (Orestes p. o.), Ind.—Sparks from a passing locomotive are credited with having started a fire in the elevator of the Urmston Grain Company on October 24. The damage was slight.

Sherman, S. D.—The elevator here operated by the Farmers Elevator Company and 45,000 bushels of grain were totally destroyed by fire on October 26. The cause of the fire is unknown.

Fullerton, N. D.—A small damage loss was sustained by the Fullerton Equity Elevator Company on October 15 when fire originated in their grain elevator due to spontaneous combustion.

Mt. Joy (Atlanta p. o.), Ill.—On October 24, the Eminence Grain & Coal Company sustained a loss by fire when their corn crib was totally destroyed. The company operates an elevator there also.

Ringsted, Iowa.—Because of the tremendous strain imposed upon it by its contents of corn, one of the walls of the bin of the Farmers Elevator Company burst and spilled a large quantity of corn on the ground.

Hornick, Iowa.—The elevators of the Armour Grain Company and the Western Terminal Elevator Company, together with 15 residences, were burned on October 12. More than 80,000 bushels of wheat were destroyed.

Georgetown, Ky.—Fire damaged to the extent of \$50,000, the seed cleaning plant and warehouse of G. M. Taylor. The plant contained 50,000 bushels Bluegrass seed. The loss is partly covered by insurance.

Warren, Ohio.—The grain elevator and flour mill of the Wadsworth Feed Company here was destroyed by fire on October 26. The loss amounted to between \$80,000 and \$95,000. John X. Wadsworth is president of the company.

Carthage, Mo.—The elevator of the Cowgill & Hill Milling Company together with 90,000 bushels of wheat burned on October 11. The total loss amounted to \$150,000, partly covered by insurance. The mill proper was saved.

A BOOK ON BELTS

Is there anything you want to know about belts, belt conveyors or belt elevators? If there is you will find it in the new book "Belt Conveyors and Belt Elevators," written by Frederic V. Hetzel, who has had 30 years' experience in the conveying field and has presented in readable form the accumulated knowledge of years of study. Much of the material has never before appeared in print, and the book covers every phase of the subject from the manufacturing processes of belts to power requirements and all the fittings.

The book was written for belt users, and they will find it easy to understand and interestingly presented; it is also written for consulting engineers and students, for every exact, scientific enquiry is answered. There are a great many tables and formulae containing this information, but these are not permitted to interfere with the simplicity and informative character of the text. A list of the chapters will give an idea of the scope of the work:

Section I—Belt Conveyors: General Description of Component Parts. Development of Belt Conveyors. Belts and Belt Manufacture—Rubber Belts, Canvas Belts, Balata Belts, Solid-woven Belts. Supporting and Guiding the Belt. Driving the Belt. Tension and Take-up Devices. Loading the Belt. Discharging the Belt. Protecting and Cleaning the Belt. Package Conveyors. Special Uses of Belt Conveyors. Life of Belts. When to Use Belt Conveyors.

Section II—Belt Elevators: General Descriptions. Centrifugal Discharge Elevators. Elevator Buckets. Continuous Bucket Elevators. Belts for Elevators. Fastening Buckets to Belt. Driving Belt Elevators. Elevator Boots. Inclined Elevators. Elevator Casings.

The publishers of the volume, John Wiley & Sons, Inc., 432 Fourth avenue, New York, have performed

FIRES—CASUALTIES

Smithville, Ark.—Fire destroyed the feed mill of J. A. Reed not long ago.

Beloit, Iowa.—Fire completely destroyed the grain elevator here on October 12.

Gibbon, Neb.—Fire destroyed the elevator here with a loss of about \$70,000.

Mabton, Wash.—The Mabton Alfalfa mill burned recently with a loss of \$10,000.

Loudonville, Ohio.—Fire damaged on October 30, the property of the Loudonville Mill & Grain Company.

Gilby, N. D.—The Duluth Elevator here together with thousands of bushels of grain burned on October 31.

Briedwell (Amity p. o.), Ore.—On October 19 fire destroyed the grain warehouse here with a loss of \$50,000.

Wells, Minn.—The Farmers Elevator here was struck by lightning on October 21 and practically destroyed.

Coffeyville, Kan.—On October 28 fire destroyed the elevator and storehouse of the Allin Grain Company.

Salisbury, Mo.—The Farmers Grain Elevator here on October 11 was destroyed by fire with a loss of \$25,000.

Bordulac, N. D.—The grain elevator of E. A. Roach was totally destroyed by fire of unknown origin on October 12.

Palo, Iowa.—The elevator and its entire contents were destroyed by fire on November 2. The loss amounted to \$25,000.

Libertyville, Iowa.—Arthur Milmer's elevator was destroyed by fire with a loss of \$7,000. The loss is covered by insurance.

Brenham, Texas.—Fire destroyed the warehouse of the Washington County Warehouse Company. The loss amounted to \$75,000.

Norcat, Kan.—Fire destroyed the elevator here with 500 bushels corn and 2,00 bushels wheat which were in the house at the time.

Erick, Okla.—The elevator of the Erick Wheat Growers Association was totally destroyed by fire on October 6. The cause is unknown.

Grove (Silver Lake p. o.), Kan.—The elevator of H. B. Dougan was totally destroyed by fire on October 15. The cause is unknown.

Liberty, Sask.—On October 4 fire destroyed the elevator of the Liberty Grain Company and 18,000 bushels of grain. It was a total loss.

Cuba, near Valley City, N. D.—Fire on October 14 destroyed the elevator of the Atlantic Elevator Company with 18,000 bushels of grain.

Shady Bend, Kan.—On October 27 the elevator of Ben L. Yohe was almost totally destroyed by fire which originated from a cause unknown.

Winner, S. D.—The elevator of the Rosebud Grain Company here together with contents including 45,000 bushels wheat burned on October 18.

Everest (Wheatland p. o.), N. D.—The elevator here of the Northwestern Elevator Company, together with 6,000 bushels wheat held in storage, burned recently.

Chicago, Ill.—A loss of more than \$1,000,000 was caused when fire destroyed on November 11 the large grain elevator of the Pennsylvania Railroad

operated by Hales & Hunter, commission merchants. More than 1,500,000 bushels of oats owned by the company were burned.

Hamlet, Ind.—On October 20, the elevator operated by the Hamlet Grain Company was slightly damaged by fire which originated from some unknown cause.

Balfour, N. D.—A dust explosion in the O. & M. Elevator here wrecked the building and caused a considerable quantity of grain to be spilled on the tracks.

Auburndale, Wis.—The Wm. Schmidt Feed Mill here was burned on October 18. The fire started from a gasoline engine. The loss amounted to \$10,000.

Wilsey, Kan.—The Farmers Union Co-operative Association sustained a very slight loss from fire on August 15, caused by sparks from a passing locomotive.

Brush Creek, Tenn.—Fire recently destroyed the Brush Creek Mill & Elevator owned by J. B. Ferguson. The loss amounted to \$35,000, covered by insurance.

Arkansas City, Kan.—The Probst Grain Company sustained a damage loss of several hundred dollars from fire which, according to reports, originated in the motor.

Cambria (Clinton County), Ind.—The elevator of the Ruch Bros. was almost totally destroyed on October 30 by fire which originated from some unknown cause.

Crosby, N. D.—The elevator of the Crosby Grain Company was damaged slightly by fire on October 2. The fire was discovered before it had gained much headway.

Vernon, Texas.—Fire totally destroyed the building and contents of the feed store here operated by A. T. Stanford. The loss amounted to \$2,250; insurance, \$1,700.

Fort William, Ont.—A dust explosion on October 21 caused the collapse of the small elevator of the Bowle Grain Company. The elevator had capacity of 6,000 bushels.

Chelsea, Mich.—D. C. McLaren's large hay shed was destroyed by fire on October 19 together with a large amount of baled hay. Loss is partly covered by insurance.

Buffalo, N. D.—Two elevators, those of the Farmers Company and the Great Western, were burned together with entire contents of grain. The loss amounted to \$75,000.

Flora, Ill.—Fire damaged the warehouse of the Flora Seed & Milling Company. The company will build a new and modern concrete structure which will occupy the old site.

Memphis, Tenn.—Fire destroyed on October 7 the grain elevator and feed plant of the Sessums Grain Company with a loss of \$60,000. Only part of the loss is covered by insurance. The company plans to build a modern plant at once.

St. Louis, Mo.—The grain elevator and warehouse of the Harsh-Polk Grain & Commission Company burned on October 22 with a loss of \$36,000, which is fully covered by insurance. The elevator and warehouse was valued at \$20,000; the grain, at \$16,000.

Evansville, Ind.—The large warehouse of the Independent Hay & Grain Company burned on October 23. It was owned by John K. Jennings and the

their work well; the paper and printing are of high grade and the 291 illustrations cover every point. Furthermore each chapter is subdivided and given separate headings so that the solution of any prob-

lem can be quickly found by reference to the index. The book has 333 pages and the price is \$5, which is little enough for those who have belting problems to meet.

HAY, STRAW AND FEED

HAY ESTIMATES

The Crop Reporting Board of the Bureau of Agriculture Economics makes the following estimates November 8, from reports of its correspondents and agents: Hay, all, 108,736,000 tons, against 96,802,000 tons in 1921, and 102,129,000 the 1916-1920 average. The yield per acre is placed at 1.42, against 1.38 the 1912-1921 average. The price November 1 is placed at \$10.96 against \$11.13 in 1921.

TEST PORTO RICAN LEGUME HERE

Seed of *Crotalaria juncea*, or sun-hemp, a legume successfully introduced into Porto Rico by the Federal experiment station at Mayaguez, was recently sent by that station to state experiment stations south of the Ohio River and along the Pacific Coast to be tried out as a cover crop. This legume makes quick growth, flowering the second month and ripening the third. Very favorable reports concerning it have been received from a number of experiment stations by the United States Department of Agriculture.

INTRODUCE FORAGE CROPS

Forage crops introduced into Porto Rico by the Federal experiment station have given great impetus to cattle raising on the island, according to reports received by the United States Department of Agriculture. The station has found the velvet bean and the *Crotalaria* successful crops to furnish concentrated feeds, as well as valuable for soil improvement. Napier, or elephant grass, has proved the best of the introduced grasses for roughage, although Guatemala grass does well on dry land, and a pasture grass from Java has been found excellent.

HAY IN DEMAND

In their letter of November 10, Albert Miller & Co., of Chicago say: All offerings of sound Timothy hay continue to meet a ready sale with prices holding very firm.

Best grades Clover and Clover Mixed in good demand. Clover especially wanted. There is an urgent demand for Western and South Western Prairie. Best grades Alfalfa needed badly.

Do you know how your hay is handled after it reaches Chicago? If not write for circular describing "How Hay is Handled on Chicago Market." Also "How to Load Hay for Consignment to Terminal Markets".

THE CINCINNATI HAY MARKET

"The inability of hay shippers to get cars for loading appears to be the only factor responsible for the present strong market in Cincinnati," says the Mutual Commission Company of Cincinnati in its letter of November 11. "Receipts in this market during the past month have been the lightest in many years and at present, there appears to be no immediate relief in sight, so far as the car supply is concerned.

"The demand for hay in the territory supplied by this market has been exceedingly light and therefore prices have been advancing very slowly. A liberal movement would undoubtedly cause a demoralized condition at this time. The demand will probably be much better when we get colder weather, and with the prospects of a continued light movement, prices can advance rapidly at any time."

HAY SITUATION AT ST. LOUIS

BY S. F. LARRIMORE

Receipts of hay in St. Louis recently have been liberal, at least in comparison with the previous month. The Timothy hay market is easier, under continued liberal receipts and limited local demand. The trade is apparently well filled up, and while there still continues a fair demand, there is some accumulation, especially on the medium and lower grades, which are in the largest offering. Good high No. 1 Timothy still continues scarce and selling readily at fair prices. The continued warm weather is acting as a damper to the trade and restricting consumption. Should the weather turn cold we should see a much improved outlet.

Light Clover Mixed is quiet, receipts being liberal and while the demand is fairly good for first No. 1 Light Mixed, the lower grades are slow. Heavy Mixed Clover hay continues to rule steady and there is a fair demand for it when it contains at least

half Clover. Pure Clover hay is easier, the offerings being more liberal and the demand limited. The situation at the moment is weak and low prices prevail. The Alfalfa situation is firm: Receipts of Alfalfa are light and there is an excellent local demand for high grade Alfalfa suitable for dairy feed, which is commanding outside figures. There is also a good demand for good No. 1 milling Alfalfa hay that has a good color and is dry and sound. The Prairie hay market is firm and the trade is in the market for liberal supplies of good quality. In brief, good Alfalfa and Prairie are in demand and receipts are light. The rest of the grades are not active.

NEW FEED BRANDS

"ORANGE BRAND" livestock and poultry feeds, and family and bakers' wheat flour, Graham flour, rye flour, White and Yellow cornmeal, and bran. Nicholls-Loomis Company, Los Angeles, Calif. Filed

ORANGE BRAND
KATTLE-KANDY

November 3, 1921. Serial No. 154,990. Published September 12, 1922.

"KATTLE-KANDY" stock food. George F. Horton, doing business as Horton & Horton, Houston, Texas. Filed October 6, 1921. Serial No. 153,809. Published October 3, 1922.

Trademarks Registered

159,261. Cottonseed meal. Ashcraft-Wilkinson Company, Atlanta, Ga. Filed June 25, 1921. Serial No. 149,618. Published February 14, 1922. Registered September 26, 1922.

159,290. Poultry feed. The Brooks Company, Fort Scott, Kan. Filed May 2, 1921. Serial No. 147,084. Published January 10, 1922. Registered September 26, 1922.

159,293. Poultry feed. The Buckeye Cotton Oil Company, Cincinnati, Ohio. Filed June 27, 1921. Serial No. 149,681. Published January 24, 1922. Registered September 26, 1922.

159,355. Horse feed, cattle and dairy feed, poultry feed and hog feed. Henry Fruechtenicht, Louisville, Ky. Filed December 21, 1920. Serial No. 141,364. Published June 28, 1921. Registered September 26, 1922.

159,381. Stock and poultry feed—namely, cottonseed meal. Humphreys-Goodwin Company, Memphis, Tenn. Filed August 27, 1920. Serial No. 136,555. Published January 10, 1922. Registered September 26, 1922.

159,397. Laying mash, starting food, growing food, hatching eggs and baby chickens. Arthur E. Kerlin, Center Hall, Pa. Filed October 24, 1921. Serial No. 154,519. Published June 27, 1922. Registered September 26, 1922.

159,406. Rye flour, dairy feed, horse feed, scratch feed, and chick feed. Ladish Milling Company, Milwaukee, Wis. Filed August 28, 1920. Serial No. 136,594. Published January 24, 1922. Registered September 26, 1922.

159,479. Stock and poultry feeds, breakfast cereals and flour. The Portland Flouring Mills Company, Portland, Ore. Filed June 21, 1921. Serial No. 149,484. Published February 14, 1922. Registered September 26, 1922.

159,509. Stock and poultry feeds. John Joseph Schreiber, Minneapolis, Minn. Filed July 20, 1921. Serial No. 150,672. Published February 7, 1922. Registered September 26, 1922.

Trademark Registrations Canceled

130,383. Stock feed. Owensboro Products Company, Owensboro, Ky. Registered April 20, 1920. Canceled September 6, 1922.

STANDARD ALFALFA GRADES FOR TEXAS

A conference of Texas Alfalfa growers at El Paso, Texas, has resulted in the adoption of standard grades for Alfalfa in the State of Texas effective October 20. According to the new grade "choice" may be reasonably fine leafy Alfalfa of bright green color; may contain either 5 per cent of foreign matter or bleached Alfalfa or 5 per cent both combined; it should be well cured, sound, sweet and well-baled. "Standard" Alfalfa is that of greenish color, of coarse or medium texture; it may obtain 20 per

cent of bleached Alfalfa and 5 per cent of foreign matter or it may be of greenish cast, of fine or medium texture, 20 per cent foreign matter and 10 per cent bleached Alfalfa. Any Alfalfa that contains enough grass burrs or Russian thistle to materially affect its feeding value or handling will be classed as "Alfalfa containing excessive burrs" or may be classed as "no grade."

RECOMMEND NEW YORK HAY TERMINAL

The construction of a union hay receiving terminal in New York City which would have direct connections with all hay carrying railroads has been given consideration by the State Department of Farms and Markets of New York in a report which it made recently. The Departments also recommended revision of the methods of hauling hay in the city to reduce the costs and to change the commission charge for handling from a per-ton basis to a basis of percentage of sale returns. The use of the Federal hay grades is recommended with Federal inspection of hay. The report says among other things that, "Owing to the lack of storage space in or near the city for surplus shipments, prices fluctuate with light and heavy receipts. Comparatively few cars cause a glut in the market, forcing prices to a low level, and vice versa. This instability of prices, it is imagined, will be cured by constructing the union hay storage for the accumulation of stock."

HAY PRICES ADVANCE DURING OCTOBER

A steady advance in hay prices during October is reported by the United States Department of Agriculture. The average price of No. 1 Timothy as reported by 10 of the larger markets to the United States Department of Agriculture advanced about 75 cents per ton, while the average price of Alfalfa at the principal markets advanced about \$2.25 per ton.

Scarcity of cars is given as the principal market factor; the advance on Timothy was attributed more to the scarcity of good hay in the markets than by an increased demand. The surplus to be marketed was reported to be larger than last year and the demand from consuming sections less because of the large quantities of local forage available.

The marketable surplus of Alfalfa was estimated to be less than for the previous year, while the drouth in certain sections of the West and Southwest created a demand of sufficient volume to have absorbed already most of the market hay in nearby territory. Emergency rates equal to 50 per cent of the regular rates have been made by certain railroads on hay for Texas and New Mexico. This will make possible the movement of hay from Colorado, Utah, and Wyoming, from which states it has heretofore been almost impossible to move hay because of the high transportation charges, the Department states.

High Alfalfa prices are expected to result, to some extent, in the substitution of Prairie and other hays until the prices of these hays advance or Alfalfa prices come to a comparable basis.

Prairie hay prices also were firm. The scarcity of cars restricted the movement so that at times receipts were scarcely equal to the demand in some markets. For the month the market was generally steady with the demand probably slightly below normal.

HAY INSPECTION

Together with the new Federal hay grades, the United States Department of Agriculture has announced the establishment of Federal inspection service at Washington, D. C., Alexandria, Va., New York, Chicago, Philadelphia, Richmond, Va., Boston and Auburn, N. Y. The Federal grades are for Timothy hay, Clover hay, Timothy and Clover mixed hay, mixed grass hay, and Timothy and grass mixed hay.

W. M. King has been appointed as Federal Hay Inspector for Washington, D. C. and Alexandria, Va., by Secretary of Agriculture Wallace. Inspector King is well known to the hay trade, having been associated with several Alexandria hay firms for a number of years prior to 1917. Since that time he has been connected with the hay work of the United States Department of Agriculture, first in the Grain and Hay Market Reporting Service, and for the past two years at the Hay Standardization Laboratory where he assisted in developing the present hay grades.

Inspectors will be appointed at the other inspection points designated as soon as they have completed a special course of training in hay grading and inspecting now being conducted at the Department's hay standardization laboratory. Five of these men are employed by the Department in cooperation with commercial organizations interested in the hay trade, while the City of Boston is cooperating with the Federal Government in the employment of the sixth. The inspector at Auburn will be available for making inspections at shipping points in that section, while the other inspectors will devote most of their time to grading hay received in the markets named.

The school for inspectors at the Alexandria labor-

atory is a new feature of the Department's standardization work. With definite hay standards like the Federal grades it was felt that inspectors should have systematic training to insure uniformity in their work. The course includes instruction in making color determinations, separations for class and foreign material, and the judging of grades by making estimates of the percentages of the various factors on bales of hay on which actual analyses have previously been made. Classes will also be conducted on the administrative details of a Federal hay inspector's work and in the marketing of hay. Similar classes are to be conducted at various times in the future to train inspectors to be located at other large markets and shipping points. Most of these men will be employed in co-operation with farm or trade organizations or states which have laws governing hay inspection.

HAY HIGHER IN NEW YORK

BY C. K. TRAFTON

While hay prices have moved to a higher level during the past month, the market has remained remarkably steady as a rule. The variations have been surprisingly slow and circumscribed, the upturn having been decidedly gradual; almost a hardening tendency.

The fact of the matter is the demand showed no great enlargement as nearly all buyers have been in a somewhat cautious mood and therefore inclined to buy in a conservative fashion, taking only such small lots from day to day as actually needed to meet urgent requirements. The firmness was to a large extent attributable to the paucity of stocks, the receipts having been generally meager.

The truth is, farmers and country shippers have been shipping little to this or other seaboard markets, partly because they were dissatisfied with prices paid, and partly because they had found it exceedingly difficult to obtain cars. Obviously it was absurd to expect farmers to deliver any noteworthy quantities to country stations as long as they realized that only a limited number of cars was obtainable. Because of this fact the arrivals by rail have been wonderfully insignificant, scarcely ever more so, some days only one or two cars arriving at some of the terminals. Therefore buyers in general were frequently, if not invariably, compelled to depend upon river or canal boats for supplies. Hence it was a fortunate thing that it was possible to bring hay in by waterways. Had it not been for this there would have been a decided famine, and no doubt prices would have gone a great deal higher.

It was also plainly evident that stronger undertone was partly in sympathy with the rapid advance in the cost of other feed stuffs. In a word there was a material upturn in the price of corn, oats, and millfeed, which was brought about by the remarkably light offerings resulting largely from the extraordinary scarcity of cars and engines. Frequently there was almost no bran offered on spot, and hence it was difficult to purchase under \$31. In the meantime oats were advanced in a corresponding manner and it was therefore argued that prime or No. 1 Timothy hay was comparatively cheap, especially when it was selling at \$26 in large bales, and therefore it was not astonishing that it subsequently sold up to \$29, with the ordinary grades advanced correspondingly.

Of course even the inexpert must realize that the volume of business was light; indeed it could not have been otherwise with supplies so inadequate. It is therefore patent that stocks in the hands of jobbers and consumers must be down to a low plane, and hence there is little valid reason to expect noteworthy declines until after stocks become appreciably heavier. Naturally any noteworthy increase in supplies depends to a great extent upon the transportation situation.

It is reasonable to suppose that the arrivals will begin to show noteworthy increase soon after the supply of rolling stock has been materially increased. Some assume that there will be more cars available after the rush of potatoes to market has terminated, as many cars were drafted for that purpose, because potatoes are perishable. Furthermore a large number of cars have been taken for shipment of coal, as huge quantities were needed at interior points before the cold weather arrived. Still, apart from this, it is well-known that the railroads have only a small number of cars or engines, as they were reluctant to purchase them partly because of the bad economic and labor situation, and the cost of material and labor combined with the strikes made the production of rolling stock decidedly slow and expensive.

Afterwards the offerings became slightly heavier as receipts were moderately larger, especially by river boats. According to some receivers, invoices showed some enlargement and it was alleged that farmers were displaying more willingness to sell, but in spite of this the movement to the seaboard was decidedly small, owing to the continued scarcity of rolling stock. Moreover it was the general impression that there would be no material increase in the supply of cars during the next year. Consequently no big declines are expected in prices.

Trade in straw has been extremely slow, nearly

all buyers having held off claiming that prices were too high. Bids have been reduced as a rule and quotations were slightly lower notwithstanding continued meager receipts.

A feed and flour mill is soon to be erected at Bartlesville, Okla.

A branch feed store has been opened at Carthage, Mo., by Henry C. Johns.

A new feed store has been opened at Redford, Mich., for C. F. Powell.

A new hay house is to be erected at Memphis, Tenn., by E. E. Anderson.

A feed and flour business has been opened at Olathe, Kan., by G. L. Gulick.

A flour and feed business is to be conducted at Danville, Ark., by J. W. Mott.

The Starks Feed Mill at Earlsboro, Okla., has been purchased by S. E. Bryant.

A feed mill is to be erected at Chipley, Fla., for the C. E. Pleas Plant Company.

A feed and fuel business has been reopened at Vernon, Texas, by A. T. Stanford.

A feed and grocery store has been opened at Nacogdoches, Texas, by G. W. Morris.

A feed store is being erected at Zeigler, Ill., by Alex Partlock of West Frankfort.

The Killmer Bros. have opened a second feed and flour store at Little Rock, Ark.

A feed mill is to be installed for the Glesby Feed & Fuel Company of Monrovia, Calif.

A feed warehouse costing \$35,000 is being erected at Charleroi, Pa., for C. R. Mountser.

N. R. Calhoun has taken over the feed and flour business of H. E. Spirk at Odell, Neb.

A 25-horsepower motor has been installed in the Barker Feed Store at Barker, N. Y.

A feed and flour business has been opened at Van Buren, Ark., by Paine & McBride.

A new feed mill is being installed at Arcadia, Calif., by the Glesby Feed & Fuel Company.

A new wholesale flour and feed store has been opened at Marietta, Okla., by Colvin & Lowe.

W. L. Pigot has opened the Pigot Feed Store at Wichita, Kan., and will handle a full line of feeds.

A feed mill has been installed by R. O. Pixlee at Cameron, Mo., in connection with his elevator.

The feed mill at Fort Wayne, Ind., has been purchased from Francis Wiltout by Frank Bard.

A new company to be known as the Canton Feed Company has been formed at Canton, Ill.

Additional hay sheds have been completed at the house of the Clement Grain Company of Waco, Texas.

The Belkey Feed business at La Center, Wash., has been purchased by the Finnigan Bros. of La Center.

A wholesale and retail feed and flour business has been opened at Ada, Okla., for C. W. Zorn and J. O. Abney.

The Walthers Feed business at Montague, Mich., has been purchased by the Farm Bureau Market Association.

A. W. Lindsey has built a new building at Imboden, Ark., in which he will house his increasing feed business.

The feed business of H. H. Stewart at Alvin, Texas, has been purchased by the E. S. King Grain Company.

The E. Craite & Son mill at Rice Lake, Wis., has been purchased by the Western Feed Manufacturers, Inc., of Chicago.

A general feed and coal business at Doylestown, Pa., has been purchased from Horace T. Myers by Albert S. Thompson.

A building at Eustis, Fla., of the Bauman Bros. of Deland has been remodeled and will be used as a feed and seed business.

A branch store has been opened at Lancaster, Calif., by the Lancaster Feed & Fuel Company. George Eastman is manager.

A feed and flour business is being installed at Bentonville, Ark., by Thomas Curt. He purchased the business from Lee Allen.

The Chicago plant of Darling & Co. has been equipped with a grinding unit, including a Monarch Ball Bearing Attrition Mill.

To deal in feed, produce, flour, etc., the Merton Sales Company has been incorporated at Merton, Wis. Its capital stock is \$50,000.

The new feed store of F. D. Smith & Son at Deadwood, S. D., has been completed and is now occupied. The company will also handle coal.

A large office building has been put up at Battle Creek, Mich., by A. K. Zimi & Co. They will double the capacity of the feed mixing plant.

Early in December the 160-ton mill of the Ladish Company will be put into operation at Milwaukee, Wis. The Fraser Company designed and built the house, the equipment of which includes

Draver Feeders, Bauer Attrition Mills, Prinz & Rau Separators, Allis-Chalmers, General Electric, Westinghouse and Northwestern Motors.

Conrad H. Mann of Kansas City, succeeds the late W. F. Tuttle as secretary and treasurer of the United States Feed Mills Company.

The Conyers Livestock & Feed Corporation has established a new feed store at Orange, Texas, and has appointed J. W. Turner as manager.

The feed mill, cotton gin and light plant of N. L. Taylor at Mountain Home, Ark., has been purchased by W. H. McShane of Kansas City, Mo.

A Monarch Ball Bearing Attrition Mill, to be used as a custom feed plant, has been installed at Janesville, Wis., by Graham & Farley.

The Chariton Flour & Feed Company of Chariton, Iowa, has opened a business in the old Foster stand there and will handle feed, hay, flour, etc.

The Elkhorn Lumber Company of Elkhorn, Wis., has installed a new mixing plant which will enable the mill to do custom mixing for farmers.

The feed mill and warehouse of Newman Bros. Grain Company of Rochester, N. Y., is being enlarged, by the erection of a two-story addition.

A feed mill has been installed by the MacDonald Grain Company at Waterville, Wash., and will be doing grinding soon with A. R. Dickson manager.

The Regal Poultry Feed Company, Ltd., has its new plant at Port Dover, Ont., nearly completed. It is four stories high and has capacity of 15,000 bushels.

D. A. Quinn is now with the J. J. Badenoch Company of Chicago. He was formerly sales manager of the Western Feed Manufacturers, Inc., of Chicago.

A barley mill and feed store at Ducor, Calif., has been purchased by R. J. Land who for 12 years has been in the feed business at Porterville, Calif.

A store has been opened at Lebanon, Tenn., by the Marrs Bros., in which all kinds of feed, seed and flour will be handled. Robert and Foster Marrs are interested.

J. S. Morgan of Haven, Kan., has organized as the Haven Feed Company and will carry a complete line of millfeed, corn chop, Kaffir, tankage and cottonseed meal.

Capitalized at \$50,000, the Cudahy By-Products Company has been incorporated at Cudahy, Wis., to manufacture stock feed, etc. M. Cudahy, G. Kroeck and G. Long are interested.

The W. J. Gantter Company has been incorporated at Rhinelander, Wis., by William J. Gantter to conduct a feed, flour and seed business. A store and warehouse has been opened for the firm.

The capital stock of the Albert Todd Company, Inc., of Owosso, Mich., has been increased from \$20,000 to \$35,000. The company will conduct a wholesale and retail hay and feed business.

Incorporation papers have been filed by the Kerr Williams Feed & Fuel Company of Kansas City, Mo., capitalized at \$25,000. J. C. Kerr, R. F. Lindsay and Russell Williams are interested in the company.

A dam and feed mill at Symco (Manawa p. o.), Wis., has been purchased by O. Esche and A. C. Lindsay. They plan to make improvements and erect a mill and have organized as the Symco Water Company.

The American Hominy Company has moved its feed sales department to Chicago. A. W. Bosworth is manager and is now located in the Peoples Life Building. The Davenport plant of the firm has been remodeled and enlarged.

Capitalized at \$100,000, the L. S. Greenwood Company has been incorporated at Milwaukee, Wis. The incorporators are L. S. Greenwood, H. T. Illing and F. W. Wundt. The company will conduct a feed, flour and cereal milling business.

To manufacture and deal in feeds, seeds, and agricultural products, the Murphy Products Company has been incorporated at Delavan, Wis. Its capital stock is \$50,000. James H. Murphy, Robert H. Sage and Lawrence E. Murphy are interested.

Ryther & Warren of Enfield, Mass., are erecting a warehouse and elevator at Belchertown, Mass. It will have capacity of 20 cars sacked feed. The elevator will be equipped with cleaning and grinding machinery furnished by the Munson Mill Machinery Company.

The Universal Mills of Fort Worth, Texas, has placed its advertising account with the Herndon-Johnson Advertising Company of Fort Worth. The agency is preparing a newspaper campaign, covering the Southwestern territory, on the Universal "Superior" brand of stock and poultry feeds.

Newberry & Kiederlen have entered the feed, flour and feed material jobbing business at Chicago, Ill. In addition to their general business, selling arrangements with the Western Feed Manufacturers, Inc., of Chicago give them exclusive territory in Illinois, southern Wisconsin and northern Indiana. J. A. Newberry and A. L. Kiederlen comprise the firm.

FIELD SEEDS

CERTIFIED SEED IN MONTANA

Farmers in the Gallatin Valley, Montana, are embarking on a new venture, that of growing certified seed. Among the various kinds of grain for which applications for certification have been made is included several fields of Marquis wheat, Hard Federation wheat, Trebi Barley and Montana 36 wheat. The seed grown by these growers is being inspected by state inspectors, and if it passes inspection will be certified and sold as registered seed.

PRODUCTIVITY OF WEED SEEDS

The need for proper tests for purity and germination of all field seeds is emphasized by recent experiments which have shown that a single plant of green foxtail produced 140,000 seeds, a plant of lambs quarter produced 600,000 seeds and a single tumbleweed produced 6,000,000. The most pernicious weeds have been introduced in farming communities through their occurrence in crop seeds. A careful selection of seeds will save the farmer much time and worry at harvest time.

WISCONSIN TO THE FRONT

Wisconsin is an acknowledged leader in the production of pedigreed grain and has just recently started on a campaign to let other folks know about it. Spring seed grains are to be sold in sacks bearing the stamp of the Wisconsin Experiment Association and the inspection "Pure Bred Grains." Two-bushel cotton grain sacks will be made up in this fashion and sold to Association members at cost.

The Association has a membership of 700, and grows almost all of the pedigreed grain seed and it is expected that a large majority of the grain growers will take advantage of this opportunity to advertise their products and their state.

SEED SURVEY IN ALABAMA

Under the direction of the Alabama Farm Bureau Federation, a seed survey is to be made in Alabama, investigating seed prices and gathering information on methods which the farmers of that state pursue in disposing of and buying seeds. Dr. O. F. E. Winberg of Silverhill, who proposed the survey, said that he understood that many Alabama farmers sold their seeds and then found it hard to secure desirable selections when seeding time came. The Executive Committee asked that every member of the Farm Bureau notify the headquarters of what he had in seeds of every variety; also that farmers of each county notify their county demonstration agents.

PIGEON PEA FOR FEED

Sufficient improved pigeon pea seed for 4,000 acres has been distributed to responsible Hawaiian farmers the past year, says the United States Department of Agriculture. The seed was grown by Hawaiian farmers from seed stocks distributed by Federal agricultural authorities at Hawaii. Experiments by the Hawaiian experiment station have shown the value of the pigeon pea as a hay and pasture crop which, it has been found, under favorable conditions, will support through the year from one and a half to three head of mature cattle in prime condition. From three to five acres of native pasture grass on the same land would be required per head of cattle.

SEEDSMEN ABROAD SEE VALUE OF
UNIFORM TESTING METHODS

Leading seed merchants of European countries that export seeds to the United States recognize that the harmonizing of the work of the seed-testing stations in those countries and close co-operation with the stations in this country and Canada will greatly facilitate international trade in agricultural seeds, says Edgar Brown, in charge of the seed-testing laboratories of the United States Department of Agriculture, who recently returned from Europe where he visited the principal seed-testing stations in Denmark, Germany, Czechoslovakia, Switzerland, France, Holland, and Great Britain.

Following the recommendations of the International Seed Testing Congress, held in Copenhagen in June, 1921, modifications in the methods of testing are being made to insure closer agreement in the results of analyses made by the different nations. All countries, except Ireland and Canada, are now using the same method of making purity tests of grass seeds. Methods of making germination tests vary, but as the result of close co-operation results are rapidly becoming more uniform.

In all of the countries, with the exception of Germany, practically all seed-testing is centralized at

one station. The greater part of the commercial work in Germany, especially in connection with the export and import trade in forage plant seeds, is done at Hamburg. Most of the stations in Europe are housed in modern laboratory buildings designed for their special use and fitted with modern equipment.

ROSEN RYE SEED

The pedigreed seed requirements of the Michigan Crop Improvement Association have been met by about 12,000 bushels of Rosen rye grown in that state this season.

Growers on South Manitou Island are head selecting the best types of Rosen rye for seed plots each year, the work being done under supervision of the Michigan Agricultural College, and this rye, grown in perfect isolation, is used as foundation stock for the main group of certified seed growers. A few expert growers on the mainland are also making selections and getting splendid yield increases as a result of their extra precautions.

Michigan Crop Improvement Association growers are also producing Red Rock and American Banner wheat and Michigan Winter Barley of the fall sown seeds. Standards for registration call for a purity of 99 per cent, less than 1 foreign seed or weed seed per pound, absolute freedom from noxious weeds and a weight equal to the standard weight per bushel.

GERMINATION OF BLUEGRASS

The Department of Agriculture is endeavoring to discover a satisfactory method of making uniform germination tests of Bluegrass seed, both of Canadian and Kentucky varieties, a task which so far the seed testing laboratories in the United States have not succeeded in perfecting.

The Department, in its attempt to determine the factors influencing the germination of Canada Bluegrass, has found a great variation in the behavior of various samples. All samples are found to require a daily alternation of temperatures for successful germination. A temperature of 20° C. for 18 hours and 30° C. for 6 hours is satisfactory. Many samples give a distinctly higher germination when exposure to light is added to the above temperature schedule. However, it is important that the temperature schedule be not sacrificed in obtaining the light exposure.

Some samples of Canada Bluegrass do not germinate completely even with the above conditions satisfied. Work in progress is expected to determine all the factors necessary to make a dependable germination test of Canada Bluegrass possible.

SEED EXCHANGE TO BE FORMED

Members of the Ohio Seed Improvement Association and the Ohio Farm Bureau Federation are interested in a proposed seed exchange whose primary purpose will be to protect the farmer against unsatisfactory seed. It was said at the meeting of the joint committee representing these organizations that Ohio had in many instances been the dumping ground for unsatisfactory farm seeds.

A. E. Anderson of the Federation in addressing the committee said:

"The great need for such an exchange now is to furnish to farmers of Ohio, Clover and Alfalfa seeds of known origin and quality. It has been known for many years that this state has been the dumping ground for much poor seed.

"One of the main troubles has been the importation and sale in the state of large quantities of Clover seed from Italy and other foreign countries. These seeds have been branded by the United States Department of Agriculture as comparatively unsatisfactory. Experiment stations in Michigan and other states have shown them much inferior in comparative tests to native seed. Unfortunately, their seeds will pass a test for purity and germination, but they will not produce satisfactory crops in Ohio."

BUY YOUR KENTUCKY BLUEGRASS SEED
EARLY

Buy your Kentucky Bluegrass early and get the benefit of prices when there is no scarcity and of quality before the best seed has been sold.

The world's supply of Kentucky Bluegrass is grown in two rather limited areas, one in Kentucky, the other in the adjoining corners of Missouri, Iowa, Kansas and Nebraska. The June estimate of seed in the rough this year was approximately 1,000,000 bushels for Kentucky, and 400,000 bushels for the other Bluegrass region, the largest crop since 1912. The holdover due to the very large crops has now practically disappeared because of comparatively short crops over several years and an extremely

short crop in 1921. It should, therefore, be possible by purchasing early, to get fresh seed of good quality both as to purity and germination.

The average purity of all samples of Kentucky Bluegrass received by the Colorado Seed Laboratory between September 1, 1921 and February 15, 1922 was 75 per cent; the highest was 90 per cent, the lowest 63 per cent. While for the period from February 15 to June 1 the average purity was 45 per cent, the highest 82 per cent, the lowest 7 per cent. The scarcity of Bluegrass seed during that season accounts for attempts to market such a low grade of seed but the general tendency holds for other years. The early market quotations are for seed weighing 20 and 21 pounds per bushel, a little later you will notice quotations are on 19 and 20 pound seed, later on 18 and 19 pound seed.

This general tendency during years when there is no special shortage is shown by the samples received here during the season of 1920 and 1921. The average purity for samples received between September 1, 1920, and February 15, 1921, was 78 per cent, for those received between February 15 and June 1 it was 68 per cent.

The samples received since September 1, 1922, average 82 per cent. Unless this year is different from others it will not be as high next spring. Data covering past years shows that the price goes up as the seeding season advances.

It appears, then, the part of good judgment to buy your seed early, to look on the label on bag or bin, to see that you have a good grade both as to purity and germination and that it contains few or no noxious weed seeds.

SEEDS HIGHER IN NEW YORK

BY C. K. TRAFTON

Business has been fairly active in the local market for field seeds and the general tone is decidedly firm. Clovers have been especially strong, averaging from 1 to 2 cents higher. The higher import duties are mainly responsible for the general upturn.

Red Clover has again advanced about 2 cents as buyers have been anxious to secure spot supplies at current prices, which are well below importing costs. Moreover, exporting countries have shown no willingness to absorb part of the increased import duty by lowering c. i. f. prices. France is now asking 20 cents, compared with 18 cents a month ago, and is offering only small lots. Hence import business, with the new duty of 4 cents, is virtually impossible, and there were no arrivals of foreign seed during the month, as was the case also in September. About 140 bags were exported to the United Kingdom.

Crimson Clover has been firm, but not quotably changed. There has been no pressure to sell as arrivals were only about 550 bags, compared with 2,440 during September. France is still offering new crop seed at 14½ cents c. i. f. New York, but buyers are not interested.

White Clover has been practically unchanged, although some holders are asking slightly more for the more choice selections. The importing situation remains strong with arrivals for the month of only 27 bags, against about 340 in September.

Alsike has advanced about 1 cent, although there has been no particular feature to the market, aside from the fact that the increased duty is interfering with export business in Canadian seed, although some has been sold "in bond." Canadian shippers have been selling direct to Europe at about the same prices—13 to 14 cents—which they quote to exporters here. Only one shipment was reported—88 bags to Germany—compared with about 450 bags to Belgium in September.

Alfalfa has scored another advance of about 1 cent as supplies of good seed are becoming scarce and there seems to be little chance for noteworthy importations from Argentina. Hence no difficulty has been experienced in selling seed on spot or afloat on a basis of 13½ cents in large lots. Buyers in all markets have been eager to secure seeds on that basis as Argentine is now offering at 11½ to 12½ cents c. i. f. New York, to which 4 cents duty must be added. The month's arrivals were only 2,865 bags, compared with about 11,600 during September.

Timothy has been strong, fully 1 cent higher, owing to marked improvement in the export demand. During September only about 295 bags were exported, whereas the October total was close to 3,400 bags, including about 1,900 to the United Kingdom and roundly 1,100 to Germany.

Orchard Grass has shown no quotable change locally, but the tone is distinctly firmer. Business was fairly active, especially late in the month when a good interior demand developed. It seemed evident that the domestic crop was turning out less than expected, partly because unsatisfactory prices made many farmers unwilling to thresh. Moreover, foreign markets are from 1 to 2 cents higher, both Denmark and Germany quoting 12 cents c. i. f. New York. Only 840 bags were received from the former country during the month, compared with September's total of about 4,570 bags.

Redtop has gained about 1 cent owing to better

export trade, the shipments being about 490 bags, chiefly to France, against nil in September. Kentucky Bluegrass is not quotably changed, but the undertone is firm owing to exports of roughly 300 bags, against none during September. Rye grass has gained about 1½ cents additional owing to good demand, smaller arrivals, and higher quotations from abroad. A short time ago importers bought English seed at 8 to 8¼ cents c. i. f., but shippers now ask 8½ cents, while Italian seed is offered at 8.40 cents. The United Kingdom, Argentine, New Zealand, and France supplied the month's arrivals of 1,720 bags, which compared with the September total of 2,140 bags.

Vetch has been in good demand at firm prices with German seed offered at 13 cents c. i. f. New York. Arrivals were roundly 1,000 bags, against about 870 during September. Rapeseed has been inactive and slightly easier, although Japanese shippers have been firm at 5.40 cents c. i. f. New York, while French seed is quoted at 6 cents. Arrivals were 2,823 bags, against 440 during September. Other Oriental seeds are firm. About 1,110 bags of Red Millet and 1,800 bags of hempseed were received during the month. Sunflower seed has been slow, especially the importing end as Argentina is offering at 5 cents c. i. f. New York, to which a duty of 2 cents must be added; whereas domestic seed is quoted at 6½ cents. There were no arrivals during the month, against 2,815 bags during September. Canary seed has been firm with arrivals of only 625 bags, compared with 3,950 in September. Argentine seed is offered at 3 to 3¼ cents, c. i. f. New York.

Fescue seed arrivals from New Zealand were 1,100 bags, against 545 in September. The exports were smaller; only 512 bags to Holland, compared with 1,211 to the United Kingdom in September, but a shipment of about 1,000 bags is expected shortly to France. The month's arrivals included 985 bags of various fancy grass seeds, chiefly from Holland and France.

SEEDS ACTIVE AT MILWAUKEE

BY C. O. SKINROOD

Heavy receipts of Timothy and Clover seeds mark the trade for the month of October, according to the official reports on receipts and shipments by the Milwaukee Chamber of Commerce. The receipts of Clover seed for the past month have been 500,231 pounds as compared with 285,433 pounds for the corresponding month a year ago, while the shipments of Clover seed from Milwaukee for the month of October were 409,535 pounds as compared with shipments of 1,726,286 pounds for the corresponding month a year ago. The shipments of Clover seed for the past month were therefore only one-fourth of the total recorded a year ago.

The receipts of Timothy seed at Milwaukee for

the past month were 1,050,000 pounds as compared with receipts of 947,239 pounds for the corresponding month a year ago and the shipments of Timothy seed for the past month from Milwaukee were 160,065 pounds as compared with shipments for the same month a year ago of 290,077 pounds. The shipments of Timothy seed for October, 1922, were therefore just about one-half of those for October a year ago.

Taking Clover receipts and shipments for the past month, the receipts were about one-fourth larger than shipments. Comparing receipts and shipments of Timothy seed for the past month, receipts were about six times as large as the shipments. Liberal sales of Timothy seed by farmers characterize the present market, while there is apparently less disposition to sell Clover seed immediately after harvesting.

An exceptionally large crop of Clover seed was reported for Wisconsin by the Department of Agriculture of the state, the yield being no less than 308,000 bushels, as compared with only 211,000 bushels produced last year and a five-year average of 285,000 bushels. The yield is over 50 per cent larger than last year and it is also considerably above the five-year average. The high yields of Clover seed after most discouraging conditions early in the year, are due to the highly favorable conditions which prevailed most of the summer. Leading seed dealers say there will be no shortage of Clover seed after such a harvest as this from the principal Wisconsin fields.

The Kellogg Seed Company, Milwaukee, has changed its stock from \$100,000 common and \$100,000 preferred to 2,700 shares of stock of no par value and 1,350 shares of preferred stock with a par value of \$100 per share. The number of directors was also increased from five to seven. The president of the company is Fred F. Kellogg and Charles H. Baerwald is the secretary.

The official report of the Milwaukee Chamber of Commerce on the seed market for the past month says that seeds advanced with grains during October and the fighting of the Dardanelles and the fear of a Turkish crisis stimulated the seed market to considerable strength. Receipts were reported as well below expectations and the demand continued brisk with Red Clover advancing \$4 to \$5, the price ranging from \$13 to \$20.50. Alsike prices gained \$1 and ranged from \$10 to \$15. White Clover sold around \$37 to \$47 and No. 1 Northwestern flax was quoted from \$2.25 to \$2.54. The poor to good Timothy ranged from \$4.85 to \$6 and the choice to fancy from \$5.60 to \$6.50, with a rise for the month of approximately 40 to 75 cents.

There is a feeling in some parts of Wisconsin that seeds are going higher and that it will pay to hold them for better prices. One farmer near Ladysmith, Wis., in the upper portion of the state, reported that he hulled 4,500 pounds of Alsike, that

the hulling bill was paid at the old rate and that he was offered only 6 cents a pound for his crop. However this farmer says he is going to hold until the prices are right and he thinks about five times the figure offered will be correct and desirable. This report is typical of many received.

Another farmer of Rusk County, Wisconsin, reported that he had inquired at one of his local feed houses as to the price of Clover seed and he found that 8 to 15 cents would be paid, depending on quality. The farmer replied that he wanted to buy 1,000 pounds of seed. "Oh, that's different" said the dealer. "I can get some for you at 18 to 22 cents per pound and the Clover seed will be higher next spring, so you better get yours now." This farmer also decided to hold his crop until he can get something like a fair price for it. Farmers appear in many instances to have sufficient funds so that they can hold their seeds indefinitely, which forecasts a strong market, as long as this seed is held back.

The University of Wisconsin reports that there were about 5,000 acres of seed flax grown in Wisconsin during the past year. Much of the straw has been wasted and a movement is on foot to bale and store such straw in the future in the belief that it can be sold for upholstering stuffing. The Wisconsin straw is said to be long and especially valuable for stuffing if devoid of weeds and other foreign materials. This in turn will make the seed crop more valuable, the University reports.

The Courteen Seed Company reports that the seed market is firm and higher all along the line and that the seed trade is exceptionally active. Orders are reported by the company as numerous, although there is a slight seasonal lull just now. Still greater business is expected to be renewed before the end of November. Red Clover is reported as ranging in price from \$18 to \$21.50, the White Clover is quoted from \$40 to \$50, the Alsike rules from \$13 to \$17, and Timothy from \$6 to \$6.75. The White Blossom Sweet Clover is quoted from \$8.50 to \$10.50 and Alfalfa from \$15 to \$19.

A most active demand is reported in all lines of field seeds by the Kellogg Seed Company. Receipts are said to be coming in large volume and the prospects are for a very busy season all through. Red Clover is quoted from \$17 to \$21, the White is moving at \$32 to \$50, the Alsike from \$10 to \$15 and Timothy seed from \$5.75 to \$6.75.

The L. Teweles Seed Company predicts that the Wisconsin Clover seed is not going to materialize as heavy as it is now predicted. The company reports that the receipts of seeds are only fair, that for the most part the quality is high class and that prospects are for a most active season in the seed market. The Teweles company also predicts that the market for seeds will go higher as trade is now firm and the demand is brisk. The company quoted Red Clover at \$20 to \$21, White Clover ranges from \$42 to \$50, Alsike is quoted from \$12 to \$15, Timothy ranges from \$6.25 to \$6.75, White Blossom Sweet Clover sells from \$10 to \$10.50 and Alfalfa is quoted from \$19 to \$21.

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Soudan Grass, Millet, Rape.

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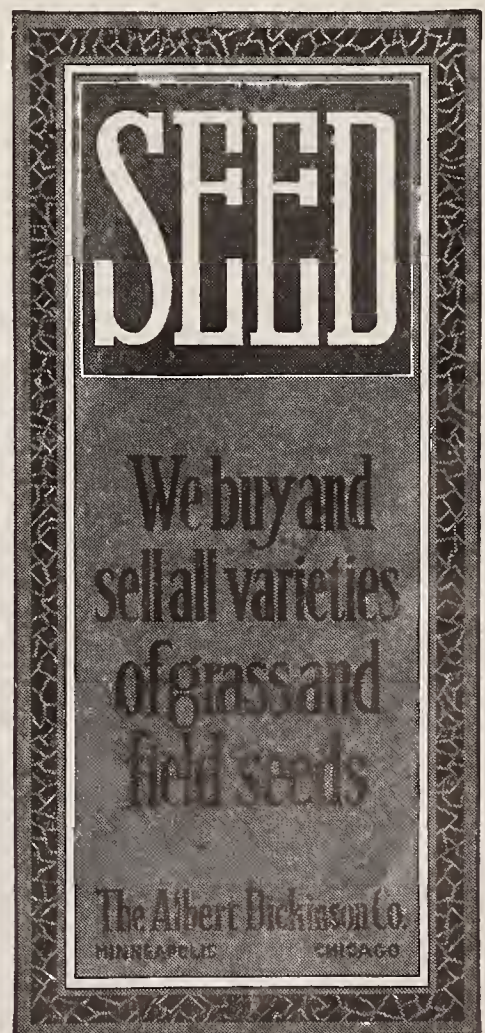
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Correspondence Invited

BUFFALO, N. Y.



of trade offered by the North American Seed Company. The outlook for the future is reported to be exceptionally bright, especially since the demand is good and there is a decidedly firmer tendency in the market all along the line. The company predicts also that the actual yield of seeds will be somewhat smaller than the official predictions, while quality on the average is high. Red Clover is quoted by the company from \$18 to \$22, the White ranges from \$40 to \$48, Alsike rules from \$13 to \$17, Timothy is moving from \$6 to \$6.60 at the present time, White Blossom Sweet Clover is quoted at \$8 to \$9 and Alfalfa is ranging from \$17 to \$20.

Arthur O. Dopp and Raymond Lang, two of the leading farmers and seedsmen of Jefferson County, have formed a partnership under the name of Dopp & Lang in Jefferson and have purchased the cold storage plant of the Jefferson Co-operative Products Company. The building is being remodeled for a first class seed house with modern cleaning and grading machinery and a modern corn drying kiln. All kinds of farm and garden seeds will be handled, both on a wholesale and retail basis. Both of the proprietors have studied at the Wisconsin College of Agriculture and are expert seedsmen. They will specialize in certified seeds and in breeding grains.

The contract has been let by J. A. Carr of Lamoni, Iowa, for the erection of a seed and feed plant.

The Western Seed Company of Missoula, Mont., has been purchased by the Sloan Seed Company of California.

J. Nelson, L. Zavitosvsky and R. Kidd have incorporated at Waupaca, Wis., as the Central Wisconsin Seed Company.

The Scott Seed Company of New Albany, Ind., is now located in another four-story building. It sold the one it formerly occupied.

Jennie L. Miller has sold her interest in the Merced Seed & Floral Company at Merced, Calif., to C. J. Davis and Miss K. Inman.

The Hargrave Seed Company of Galveston, Texas, is to be conducted under the management of R. P. Hargrave. He succeeds the late J. F. Hargrave.

The new building, including elevator, warehouse and office building of the Four States Seed Company at Clayton, N. M., is to be occupied in the near future.

A new seed store has been opened at Marietta, Ga., by the Collins Bros. The new store will carry a full line of garden and field seeds, poultry supplies and bulbs.

Northrup, King & Co., wholesale seed dealers of Minneapolis, Minn., have amended their articles of incorporation and increased their capital stock from \$150,000 to \$1,050,000.

The Monmouth Seed Company of Monmouth, Ill., has been taken over by the Community Feed & Seed Company Store of Monmouth of which George W. Siefken is buyer.

A new brick and concrete addition is to be built to the seed business of Joseph Wagoner at Beaver Dam, Wis. The addition will be 20x40 feet and will be used for storage purposes.

The Lang Grain Company of Oklahoma City, Okla., has added a wholesale seed department and millfeed department to its business. A. B. Rickert is in charge of the new department.

The Gallatin Valley Seed Company of Bozeman, Mont., has been incorporated, capitalized at \$50,000. The directors are John A. Lovelace, H. D. Bath, B. C. Parker and Charles F. Right, all of Bozeman.

The Louisville Seed Company of Louisville, Ky., will rebuild its Redtop cleaning plant at Flora, Ill., which burned last summer. Temporary equipment has been arranged for until the new house shall have been built.

The business which Glenn R. Swank has been conducting at Champaign, Ill., as the Champaign Seed Company has been discontinued. He has moved the stock to Galva, Ill., and combined it with the Glidden Bros. hardware stock.

An addition is to be built to the plant of the Marshall Seed Company of Marshall, Mo., which will double the storage capacity. In the new addition will be installed new package filling machinery, capable of filling 20,000 seed packages a day.

The J. G. Peppard Seed Company of Kansas City is interested in the erection of an Alfalfa seed cleaning plant at Roosevelt, Utah. It consists of a two-story building and smaller office building. When completed, the plant will have cost \$50,000.

The Alexander Seed Company of Augusta, Ga., has been taken over by the N. L. Willet Seed Company. The Willet company is repairing its old retail store which was destroyed by fire a short time ago. The wholesale warehouse was not touched by the fire.

Robert E. Andrews is president; William Watson, vice-president, and Henry Rader, Jr., secretary and treasurer of the Ferry Seed Company of Chi-

cago, Ill., which was formerly run as a partnership but which is now incorporated. The company will deal in Alfalfa, Timothy, Clover, Bluegrass, Redtop, fescues and garden seeds. The warehouse is located at Shermerville, Ill.

Capitalized at \$50,000, the Altavista Seed & Feed Company, Inc., has been incorporated at Richmond, Va. H. L. Lane is president; C. B. Perrow, secretary; J. T. Perrow is also interested. The company will deal in seeds, farm products, and agricultural implements.

A voluntary petition in bankruptcy has been filed by Dudley M. Irwin a leading grain dealer of Buffalo. His liabilities are scheduled at \$497,779; assets, \$238,934.

Samuel Hessian, a grain dealer and farmer of Van Wert, Ohio, has entered a voluntary plea of bankruptcy in the Toledo Federal Court with assets of \$139,450.73 and liabilities of \$119,571.10.

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

WILL TRADE FOR GRAIN ELEVATOR

A 200-acre improved farm in the Red River Valley, N. D. FARMER, 1122 Flour Exchange, Minneapolis, Minn.

FENCE POSTS

If you want genuine ax-split, Puget Sound, red cedar posts and poles, write R. L. OLIVER, R. 4, Arlington, Wash.

FOR SALE

Good location for factory between B. & O. and Big 4 R. R. Co. tracks at Pana, Ill. EDWARD McKEE, Box 196, Pana, Ill.

FLOUR AND MILL FEEDS

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products. ANSTED & BURK CO., Springfield Ohio.

WANTED

Experienced manager for 130,000-bushel terminal grain elevator. Must have executive ability, be able to do own repairs and understand making chop. Man now employed as assistant in some large poultry feed plant preferred. In reply give full details as to experience and state salary desired. P. F. P., Box 11, care AMERICAN ELEVATOR AND GRAIN TRADE, 431 S. Dearborn St., Chicago, Ill.

SALESMAN WANTED

To handle on commission reliable line of feed milling machinery and supplies in New England States. Prefer man located in southern New Hampshire or Massachusetts. Desire man having experience with feed mills or millwright work, and preferably one who is now calling on such trade for another non-competitive line. Excellent opportunity for hustling salesman who can devote part time to such line. SALESMAN, Box 11, care AMERICAN ELEVATOR AND GRAIN TRADE, 431 S. Dearborn St., Chicago, Ill.

RAILROAD CLAIMS COLLECTED

WE COLLECT RAILROAD CLAIMS covering loss or damage to grain, flour and mill products. Do not overlook delay, shortage, decline in market and deterioration claims. We have an extensive organization for handling these matters. References: Any Minneapolis bank or the *Northwestern Miller*. We are members of the Grain Dealers National Association and the Traffic Club of Minneapolis. This service is furnished on a percentage basis. No collection, no pay.

THE SECURITY ADJUSTMENT COMPANY,
1132-1156 Builders Exchange Bldg.,
Minneapolis, Minn.

For Sale

BAGS

FOR SALE

Four thousand second-hand cotton grain bags, 16-oz., 20 cents each, f.o.b. St. Louis. Large or small lots. FOELL & CO., 123 Market St., St. Louis, Mo.

FOR SALE—BURLAP BAGS OF EVERY KIND

New or second-hand, plain or printed with your brand; seamless cotton grain bags; sample bags; burlap, cotton, sheeting, or paper for car lining, etc.

Wanted: Second-hand bags; best prices paid. WILLIAM ROSS & CO., 409 N. Peoria St., Chicago, Ill.

MACHINERY

WANTED

Used Carter-Mayhew Wheat and Oats Separator. LIPSCOMB GRAIN & SEED CO., Springfield, Mo.

FOR SALE

Pulleys, 1,000; all sizes, solid cast iron, wood and steel split. Elevator belts and buckets and supplies. STANDARD MILL SUPPLY COMPANY, 819 Wyandotte Ave., Kansas City, Mo.

FOR SALE

Type Y 25-horsepower Fairbanks-Morse Crude Oil Engine; one 30-horsepower Chicago Pneumatic Crude Oil Engine. A. H. McDONALD, 547 W. Monroe St., Chicago, Ill.

WANTED

One No. 6 Monitor Seed Cleaner, complete with screens. Must be in good working condition and reasonable for cash. N. N., Box 11, care AMERICAN ELEVATOR AND GRAIN TRADE, 431 S. Dearborn St., Chicago, Ill.

OIL ENGINES FOR SALE

60-horsepower Fairbanks-Morse.
50-horsepower Otto.
25-horsepower Fairbanks-Morse.
50 other sizes.
A. H. McDONALD, 547 W. Monroe St., Chicago, Ill.

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COAL

THE COAL SITUATION AND BUSINESS

The Chamber of Commerce of the United States has asked the Coal Commission to be given an opportunity to present the views of organized business and industry, in the event the Commission, during its investigation, seriously considers any proposal looking to the nationalization of the coal industry.

In making this request in a letter to the Commission, Julius H. Barnes, president of the National Chamber, points out the "disastrous consequences of the nationalization of various industries in Russia and other countries in Europe."

At the same time, Mr. Barnes offers the facilities of the National Chamber with its large underlying membership in general industry "in the service of your investigation, at any time and in any manner you may indicate."

INCREASE IN COAL OUTPUT

A total of 12,500,000 net tons of coal were produced during the week ending November 4, according to the United States Geological Survey. Of this about 10,700,000 tons is bituminous and 1,800,600 tons anthracite. Revised estimates for the fourth week of October show 10,681,000 tons of bituminous and 1,773,000 tons of anthracite. Thus a slight increase in the total coal raised is shown for the present week as compared with the week before.

Loadings of soft coal on Monday, October 30, as reported by the railroads, was 45,298 cars, the largest number reported by any day of this year. On Tuesday loadings declined about 30 per cent, and on Wednesday showed a further decline to 28,043 cars. On Thursday, the rate of output increased and the loadings reported were 29,598 cars. The total for the first four days of the present week is a little larger than for the corresponding days of the week preceding.

Preliminary returns for the first two days of the present week show a high rate of production, but the observance of holidays in mid-week caused a sharp decline in output. The total for the week may be about 1,800,000 net tons.

The increased rate of production during the past three weeks is principally due to improvement in transportation.

PROTEST REVALUATIONS

There has been a general increase in the valuation of coal properties throughout West Virginia and in some instances, at least, this has brought a protest from the owners of such lands, says a correspondent of the *Black Diamond* in a recent letter. Strong protest has been made, for instance, by the operators of Monongahela against the rate of assessment in that country, but all to no purpose. The tax commissioner has stated that he does not desire to place undue burdens upon any class of taxpayers, but asserts that the coal industry will be required to pay its proportionate share. In Monongahela County valuations placed on Pittsburgh coal land range from \$100 to \$800 an acre, depending somewhat upon loca-

tion and local conditions. In general the valuation placed on Sewickley coal ranges from \$100 to \$300 an acre and on Freeport coal from \$100 to \$200 an acre.

Henry A. Phillips, of Pittsburgh, who owns more coal property in Monongahela County probably than any other individual, appeared before the board of equalization and review to request that there be a classification in the value at which his property was assessed. He owns about 15,000 acres. His coal is valued at from \$190 to \$200 an acre on an average, so that the total assessed value upon which he will be called upon to pay taxes will be in the neighborhood of \$3,500,000. Mr. Phillips' case has generally been regarded as a test case. The Monongahela Coal Association has announced it would protest against increased valuation of coal properties in Monongahela county. The tax commissioner contends that the assessed valuation of property in Monongahela County has been fair and uniform.

CAR SHORTAGE AFFECTS COAL PRODUCTION

The shortage of coal cars has made increasingly difficult the production of coal in mines in the Illinois coal fields adjacent to St. Louis in the Fifth and Ninth Coal Bureau Districts.

The report for the week ended October 28 shows a slight increase in tonnage as compared with the previous week, but the slight improvement in the car situation in the week ending October 21 has evidently been lost.

Production of 82 reporting mines of the more recent week was 382,005 net tons as against 377,054 the previous week. Fifty-three mines reported a production of 232,075 tons, as against 228,438 tons in the corresponding week of last year.

The 82 mines worked 49.87 per cent of the total work time in the week ending October 28, as against 50.64 per cent in the preceding week. Hours lost on account of no cars from 1820 to 1885 according to the reports.

While consumers have generally been urged to hold off their storing of coal so as not to stamper purchasers into bidding against each other for supplies, P. H. Green, law secretary of the Bureau, says that in view of the low price of steam coal and the weak demand consumers of that kind of coal might find the present a favorable time to begin to store supplies. It is doubtful, he declared, whether the consumer or the operator would gain by further postponement of storing steam coal.

COAL EXPORTATIONS CONTINUE AT LOW LEVEL

"The exportation of coal continues at low level of the last few months, but importation of British coals show but little falling off," the *Black Diamond* says in its review of November 4. "Because of price advances on smokeless, New England inquiries for British coals have increased during the week, but as yet no new fixtures have been made. Most of the overseas coal finding its way to this country has been shipped to New England ports and was consigned on contract. Prices on the British product have stiffened somewhat, but still are under quotations of American coals."

A coal, grain and hay business is being conducted at Fruita, Colo., for J. S. Smith.

The Anderson Grain & Coal Company at Galesburg, Ill., has been purchased by B. E. Hewitt, who also bought the Black Diamond Fuel Company.

Edward Lundgren and Fred R. Winger have severed their connections with the firm and will operate as the Consumers Fuel & Feed Company.

H. J. Nading is no longer manager of the Farmers Grain & Coal Company of Frankton, Ind.

The yard of the Farmers Grain Coal Company at Aledo, Ill., has been improved with concrete driveways.

A new grain elevator is being erected at Green Valley, Ill., for the Farmers Grain & Coal Company.

The grain elevator and coal business of T. Paul at Dovray, Minn., has been purchased by Miles Tormey.

The Winburn & Welsh Coal, Ice & Feed Company at Fort Lupton, Colo., has been purchased by F. P. Welsh.

The retail coal business and grain elevator of B. F. Colehower at Long Point, Ill., is being operated by John T. McCoy of Streator.

The Slocum Grain Company has been organized at Ewen, Mich., by E. W. Slocum and will handle coal, flour, feed, hay and grain.

The Farmers Elevator Company at Colton, S. D., has disposed of its stock of lumber; the firm will handle coal, grain, feed and flour.

The retail coal business and grain elevators of R. T. Barton & Co. at Jamesburg, Ill., have been purchased by A. E. Betts & Son.

The yard at Eagle Grove, Iowa, of the Independent Grain & Lumber Company has been purchased by the Carry Bros. of Ledyard, Iowa.

The coal and elevator business of Crawford & Cornell at Henning, Ill., has been purchased by A. E. Betts & Son, whose headquarters are at Forest, Ind.

The coal sheds of the Kellogg Grain Company at Oxford, Neb., have been purchased by L. M. Baumgart who will conduct a retail coal business hereafter.

The grain and coal business of the J. S. Null Estate at Spring Hill, Kan., has been taken over by the recently organized J. H. Kinnear Grain Company.

The Rockville Grain & Coal Company of Rockville, Conn., has been dissolved. The business will be conducted on a partnership basis under the old name.

The Canham Grain Company's retail coal and grain business at Virden, Ill., has been taken over by the recently incorporated Virden Mill & Elevator Company.

The Goshen Milling Company has sold its coal business at Goshen, Ind., which it has been conducting as the Hawks Coal Company, to the Tyler Coal Company.

A partnership has been formed at Crandon, S. D., by G. G. Stahl and Joseph W. Meyers to operate as Stahl & Meyers and to conduct a grain, coal and flour business.

Coal will be handled by William Hoffman who has organized the Hoffman Grain & Fuel Company of Mantador, N. D. A new coal storage shed has been added to the equipment.

A. F. Castleman has organized the Castleman's Nu-Coal Yard at South Bend, Ill., and will conduct a general retail coal business. He was for two years manager of the Grange Elevator Company. With him is interested his brother Carl J. Castleman.

COMMERCIAL
EXCHANGE

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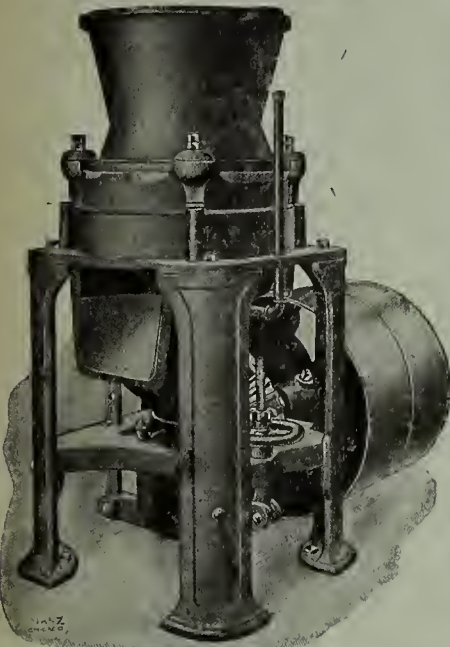
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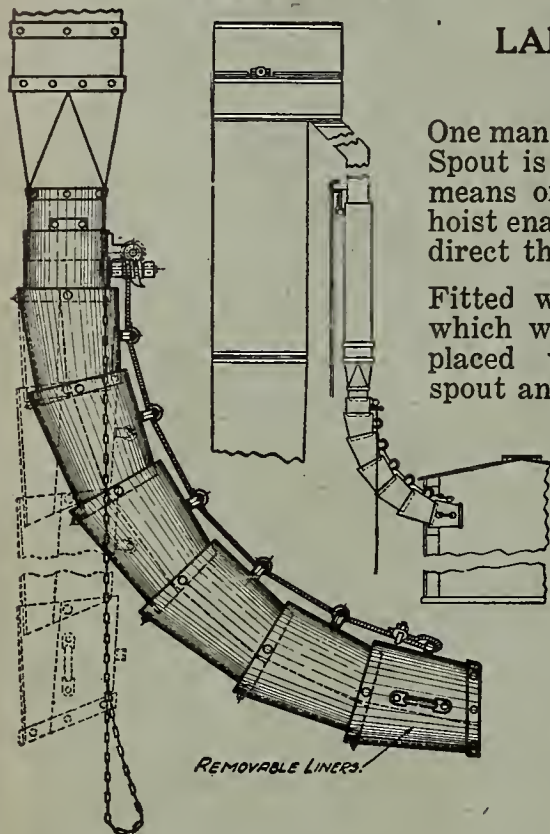
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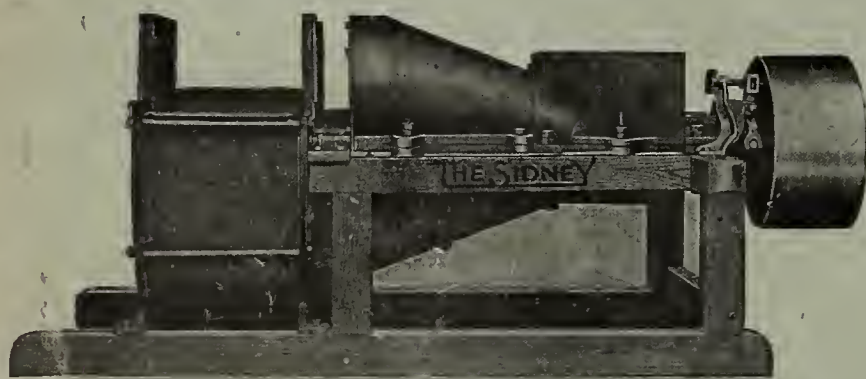
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